

Editorial

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EDITORIAL NM 2021

Ladies and Gentlemen,

This report gives an account of the activities performed in 2021 by the services of Nantes Métropole, for the benefit of all of our Community's inhabitants. It highlights all of the many and varied actions undertaken at the level of the 24 Nantes Métropole municipalities during these 12 months, that was once again marked by the health crisis.

However, despite the lockdowns and restrictions with which we all had to deal as part of the common good, Nantes Métropole maintained its course and continued its daily work, whatever the cost, with conviction, resilience, audacity and high standards. This crisis has reminded us, if it were necessary, that the future that we are building day after day, together with all of the inhabitants, will have to align more than ever with ecological transition and social justice.

As such, despite the particular context of crisis management, we maintained a high level of investment, amounting to €494 million, in order to give impetus to the new mandate through structural and strategic projects. Made possible by the good financial health of Nantes Métropole, this budget demonstrates our determination, our commitment and our ambition in the face of the challenges ahead. Our unchanging goal: to offer the best quality of life to every inhabitant of our territory, without exception, and to continue to make Nantes Métropole a living and dynamic conurbation, a reference that shines beyond Europe and the world.

In concrete terms, this resulted in a renewed and strengthened dialogue with the residents of Nantes Métropole in 2021, in particular through the Citizens' Convention. This collective approach, unprecedented in our territory, was intended to consider the concerns of citizens regarding the consequences of the health crisis in order to respond appropriately, and to build the Nantes Métropole of the future. It demonstrates that co-construction remains more than ever at the heart of our policy.

With this strong commitment, we again made mobility one of our priorities. Because the issue of transportation and travel is essential to ensure a more sober, coherent and inclusive territory and to offer a truly efficient local service for all. Among the strong actions taken this year, we note the free weekend transportation, the development of carpooling with the construction of dedicated lanes, the extension of the bicycle network, the implementation of facilities in favour of intermodality (Cyclo Station, P+R Neustrie, etc.) and the continuation of the Nantes train station project.

Imagining a more egalitarian and united conurbation, refusing the slightest exclusion, also means designing an exemplary urban development and housing policy so that everyone - starting with people in the most precarious situations - can live in a decent and fulfilling way throughout the territory. In fact, through its local hubs, Nantes Métropole is working alongside its 24 municipalities to support them in their investment projects and in improving their living environment. In 2021, for example, this was the case for the ZAC les Ormeaux in Bouaye, the Rives de Loire in Couëron or the Mauves-sur-Loire town centre. In addition, urban renewal operations were carried out in working-class neighbourhoods such as Malakoff, la Bottière and Bellevue. While reception areas for travellers were set up in Saint-Herblain and Carquefou, additional social housing units were created and others were renovated.

Our commitment also naturally includes paying particular attention to an increasingly accessible and efficient public health service, a respectful and ambitious local food policy, and a proactive approach to employment and integration, particularly through the development of a social and solidarity-based economy. Being as close as possible to the citizens also means ensuring responsible waste and water management, scrupulous cleaning of public spaces and routine maintenance of the roads with, in 2021, the renovation of the engineering structures, banks and quays, as well as the modernization of public lighting with a view to reducing electricity consumption.

In order to support the attractiveness of Nantes Métropole, we continued to emphasize an eclectic and innovative cultural policy, support for high-level sports and the maintenance of large-scale facilities such as the National Interest Market (MIN). Similarly, because higher education, research and innovation are essential to us when looking ahead to a future with multiple challenges, we continued our mobilisation in favour of this sector. This is evident from the creation of Nantes University, a unique project in France that brings together three major schools, the university hospital and research players. This new experimental public institution of excellence, oriented towards interdisciplinarity and internationalism, aims to serve the social ladder.

Obviously, our action would not have the same meaning without a strong alliance and reinforced cooperation with neighbouring territories, whether urban, peri-urban or rural. As such, we are working actively within the Nantes - Saint-Nazaire Metropolitan Cluster and the Loire-Brittany Metropolitan Cluster. We can also, for example, rely on our reciprocity contract with the Pays de Retz in order to make concrete progress on issues that stretch beyond just our municipal or metropolitan borders, such as food, agriculture, air pollution, mobility or the economy.

Ladies and Gentlemen, this report is once again a testament to the richness, diversity, and uniqueness of our territory and the work accomplished with fervour and conviction by all Nantes Métropole municipal employees in 2021. I would like to thank them for their sense of service, their dedication and their professionalism, without which our metropolis would not be able to face the challenges of today, nor project itself with enthusiasm and confidence towards the increasingly sustainable, inclusive and responsible future that we desire and are all preparing.

Johanna Rolland, *President of Nantes Métropole*

Thematic actions

CONSOLIDATING THE VISION OF NANTES AS A METROPOLITAN HUB

On the occasion of the change of status - passage from an urban community to a Metropolitan Hub on 1 January 2015, the Community Council approved the Metropolitan Pact on 15 December 2014.

It links the 24 municipalities and its main ambition is to strengthen the attractiveness of Nantes Métropole at the European level and to strengthen its proximity with the inhabitants. The objective is to develop a more innovative and efficient conurbation, with actions shared with the active forces and the different stakeholders of the territory.

The Metropolitan Pact, cornerstone of the initiative

This Metropolitan Pact is based on founding principles:

- more solidarity, in particular in favour of the least populated municipalities, to ensure a balanced development;
- more efficiency thanks to new major metropolitan facilities and the enhancement of the potential of municipalities to promote shared sporting, cultural or tourist interests;
- a renewed governance between municipalities, more collective and open with a refounded development council, a close involvement of actors and citizens.

The pact is implemented through strong, proactive measures: the financial pact, the transfer of facilities to bolster Nantes Métropole's reach, the transfer of skills to consolidate its ability to take action and the renewal of governance, especially the development council to foster closer links with citizens and interaction with stakeholders.

Some of the facilities transferred in the broader metropolitan interest include:

- the Musée d'Arts de Nantes; the Muséum d'histoire Naturelle; the Castle of the Dukes of Brittany, which houses the Nantes History Museum; the Planétarium; the Musée Jules Verne; the Rezé heritage museum, named the Chronographe; the Beaujoire stadium and the José Arribas training centre; the Beaulieu sports centre; the skating rinks in Nantes and Rezé, and the velodrome in Couëron.

Nantes Métropole has expanded its powers in the following areas:

- archaeology to facilitate development, particularly in urban areas;
- opera and the lyric arts. The objective is to recognise the role of structuring actor of Nantes Métropole and the region of the Angers Nantes Opera Joint Union (SMANO);
- the development and financing of places in inter-municipal business day-care centres (in connection with the major employment areas of the conurbation).

In addition, since 1 January 2018, it has exercised the competencies previously assigned to the Department in terms of:

- the Solidarity Fund for Housing (FSL);
- the Youth Assistance Fund (YAF);
- local information and coordination centres (CLICS);
- the road network.

The collaboration and pooling plan

Approved on 15 December 2015, the collaboration and pooling plan between Nantes Métropole and the 24 municipalities is based on the mutual desire of the mayors to develop greater solidarity and efficiency within Nantes Métropole. The plan's shared governance is based on the principle that the municipalities share the responsibility and authority, and pool their resources. In this way, it also aims to improve the level of service provided as closely as possible to the inhabitants, by guaranteeing a rise in collective competence and the security of public action.

The plan takes a variety of forms:

- closer cooperation between multiple volunteer municipalities with regard to library services, regarding the running of music schools and cost optimisation for swimming pools. Depending on the subjects and opportunities, the municipalities are also putting in place networks for exchange of professional practices or sharing of technical resources;
- buying consortia;
- the creation of shared services between Nantes Métropole and the municipalities: the Metropolitan Geographical Information System (GIS) and the Géonantes portal, document management and archives, the facilitation of Land Use Authorisations (ADS) and the Urban Supervision Centre (CSU).

Based on volunteering, the municipalities' adherence to this cooperation and pooling plan has been strong from the outset with the adherence of the 24 municipalities to one or more of these common services, according to different levels of intervention:

- **the metropolitan Geographic Information System (GIS)** handles the pooling of tools, data and human resources for the subsequent sharing of geographic data. In 2020, 24 municipalities participated in the 1st level of intervention and 21 municipalities were adhering to level 2 (GIS). 2020 was devoted to structuring the technical platform, involving organisation and access to shared and private databases (with access to GIS tools via teleworking in extranet mode), management of rights and definition of roles between the municipalities and Nantes Métropole. In addition, cross-cutting projects are giving concrete expression to the emergence of a common geographical data heritage, in particular the green space management project, the development of the "Election" application for searching for polling stations and presenting the results, and the launch of the Local Contingency Plan (PCS) project;
- **in terms of document and archive management**, an electronic archiving solution (SAE) is being studied for implementation by 2022. Since 1 January 2020, the 24 municipalities have been members of the first level of intervention, which covers the coordination of document and archive management. One of the main areas of work has been the mapping of applications and data to prepare for the dematerialization and archiving of public contracts and land use authorisations. In addition, seven municipalities are concerned by the second level of intervention for the follow-up of archiving procedures (payments and eliminations).
- **the shared service dealing with land use authorisations** aims to pool human resources and coordinate a network of land use authorisation instructors for the 24 municipalities. Following the adoption of the Metropolitan Urban Planning Scheme (PLUm) in April 2019, the service's main objective was to support the land use authorisation instructors and their managers in the development of their reference framework (PLUm/PLH - Local Housing Programme). To this end, a facilitator deployed a PLUm training system. Group workshops were also

organised within the network to develop training tools, exchange practices and for training in line with the PLUm. The aim is to enable and facilitate inter-knowledge and dialogue between the instructing departments.

- the **urban surveillance centre (CSU)** addresses the objectives of improving the management of public spaces and the safety of people and property. 4 municipalities have chosen to join this service since its creation: Nantes, Saint-Herblain, Rezé and Vertou. The municipality of Basse-Goulaine joined them on 1 July 2021. Its aim is to provide a better response to the public demand for safety and prevention and to combat the feeling of insecurity. The scheme supports the police and gendarmerie services in solving investigations and providing emergency assistance. Note: the cameras linked to the Urban Surveillance Centre are used solely for the protection of public spaces that are typically prone to significant levels of crime and have high traffic flows (urban centre areas, transport hubs and shopping districts). The service has 18 agents, including 15 specialised operators who control the cameras in real time 24 hours a day, 7 days a week. This allows the comprehensive management of public order disturbances, regardless of the time of day or night;

It should be noted that a process is currently underway to develop the cooperation and solidarity pact for the new mandate.

Investment assistance funds

On 22 June 2018, Nantes Métropole approved the terms and conditions for drawing on the investment assistance fund to contribute towards building local facilities, managed on an inter-municipal basis and used by the inhabitants of a number of municipalities. Three projects were identified: the Grand Bellevue childcare centre, the Orvault swimming pool and the Vertou central kitchen.

In 2020, the first agreement for the allocation of this assistance fund was concluded between Nantes Métropole and the community of Saint-Herblain for the financing of the Grand Bellevue inter-municipal childcare centre. This is a facility dedicated to early childhood with 40 places, of which 13 places will be reserved for Nantes families.

Making Nantes Métropole: the governance pact

On 17 July 2020, the Metropolitan Council approved the principle of drawing up a governance pact between Nantes Métropole and its 24 member municipalities. It was ratified by this same Council on 21 April 2021. At the start of this mandate, the pact is part of an overall approach aimed at establishing relations between the municipalities and Nantes Métropole.

This new governance pact is the result of four months of significant work by a group of metropolitan elected officials and mayors from all walks of life. It was also enriched by the reflections of a mirror group of non-metropolitan elected officials (designated by the working group's member-mayors) and a mirror group of the Directors General of the departments of these same municipalities. After consolidation by the Conference of Mayors, it was presented and debated during each municipal council meeting. This pact marks a new stage in the history of Nantes Métropole with a governance that is closer to the municipalities.

With this pact, the aim is to go even further in the construction of Nantes Métropole and to affirm the constant search for consensus for major metropolitan decisions:

- a stronger role for the 24 mayors and new relationships with the vice-presidents and delegated metropolitan advisers;
- strengthen ties between Nantes Métropole and the municipalities, particularly within the seven local clusters;
- share the metropolitan action with all of the municipal elected representatives, beyond those elected to the Metropolitan Council;

- ambition for greater involvement of citizens, to bring about a true metropolitan citizenship.

Making Nantes Métropole: the citizenship pact

Nantes Métropole places citizens at the heart of metropolitan action and of the municipalities. Citizens are part of a permanent dialogue to influence visions, public policies and the quality of services deployed across the metropolitan territory. This objective, enshrined in the governance pact and the metropolitan citizenship pact, is reflected in the development of a dialogue programme across Nantes Métropole that will end in June 2022.

The initiated work aims to organise the support of the projects led by the Community in the municipalities in a participatory manner. It is a matter of implementing support with an adapted level of dialogue. This system is part of a “local citizen dialogue” doctrine implemented on the Metropolitan level. It completes the free organisation of the participation of the municipalities on projects falling within their remit. As such, any inhabitant of a municipality can be associated with the projects that directly concern her/him (relating to her/his street, neighbourhood, etc.) via the local dialogue (“working method” marker) carried out by the metropolitan hubs (with the municipalities).

COOPERATION THROUGH THE ALLIANCE OF TERRITORIES

For several years now, Nantes Métropole has been developing collaborative relationships with neighbouring areas and other cities in western France. They work together by harnessing their strengths and developing joint projects that are beneficial to the territory.

Despite the health crisis, Nantes Métropole continued its mobilisation in the cooperative ventures undertaken. The political exchanges to stabilise the roadmaps were completed in 2021.

Stabilization of the strategic reference system

As a marker of the 2020-2026 mandate, the alliance of territories has been the subject of discussions with all departments to establish its strategic reference framework. A concept born in Nantes, the alliance of territories is based on the need for territories “to work together”, i.e. to accept to go beyond administrative borders so as to consider territories as organic entities in which inhabitants, ideas and wealth circulate.

The administrative limits of our EPCIs (Public Establishments for Intercommunal Co-operation) and municipalities, most of the time, are best able to lead public policies, especially in terms of proximity. But in a number of cases, it is necessary to look beyond them: firstly, in the name of the ability of public action to respond effectively at the right scale to the issues that affect the daily lives of inhabitants; secondly, because supporting transitions requires an understanding of the issues at a broader level than the metropolitan perimeter.

6 public policies are particularly concerned by this change of scale: Mobility, responsible economic development and employment, building an ecological and solidarity-based city, food, water, energy and climate.

Nantes-Saint-Nazaire Metropolitan Area (PMNSN): adoption of an ambitious roadmap

Often cited as an example of success at national level, the collaboration between Nantes and Saint-Nazaire has been built on solid foundations spanning over twenty years and harnesses actions led by the Nantes and Saint-Nazaire metropolitan area.

The “SCoT 2” master plan, designed to ensure consistent development across the metropolitan area, has been in force since 2017. This SCoT, which was approved on 19 December 2016, paves the way for the five public inter-municipal cooperation establishments (EPCIs) - Nantes Métropole, Saint-Nazaire Agglomération, Estuaire et Sillon, Pays de Blain, Erdre et Gesvres - to make significant progress towards greater consistency in their development strategies, especially those concerning housing, the economy, the environment, urban planning and mobility. Its main guidelines are now enforced in urban planning documents such as Nantes Métropole’s Metropolitan Urban Planning Scheme (PLUm), Local Housing Programme (PLH) and Urban Travel Plan (PDU).

The local areas are accordingly committed to halving the amount of land taken up by housing and businesses; for the first time, a green and blue network has been drawn up for the entire SCoT scheme; the urban framework has been bolstered to focus population growth and economic development, and 100,000 new housing units (of which 32% will be social housing) will be built across the SCoT scheme (range of 5,500 and 6,200 new homes per year for Nantes Métropole).

In 2021, two simplified changes were carried out, one intended to integrate the consequences of the ELAN law on the coastal law, the other to switch some commercial activity zones (ZACOM) from type 2 (existing commercial complexes integrated or in the process of being integrated into the urban core area) to type 1 (existing commercial complexes for the purposes of limited development within their real estate envelope).

The Nantes Saint-Nazaire Metropolitan Cluster dedicated 2021 to developing its roadmap in a process led by 6 of its Vice-Presidents, including Aziliz Gouez and Pascal Pras. This roadmap is built around a strategic component, the SCoT, and an operational component comprising the following axes: environmental protection, mobility, economic development, support for urban projects. The Metropolitan Council adopted this roadmap on 10 December 2021, in the presence of Michel Mézard, Vice-President of the Estuaire et Sillon federation of municipalities and Mayor of Savenay, and Sylvain Lefeuvre, Vice-President of the Erdre et Gesvres federation of municipalities.

As a supplement to the actions undertaken by the Metropolitan Cluster, Nantes Métropole and the Saint-Nazaire Conurbation initiated cooperative actions, including in the area of culture (Nantes Saint-Nazaire school of fine arts), economic development (Nantes Saint-Nazaire Development action plan), or digital technology with PlugIN.

Loire-Bretagne metropolitan cluster (PMLB): political coordination on current issues for the west of France

From October 2020 to March 2021, the technical and policy work undertaken within the Loire-Brittany metropolitan cluster (PMLB) provided an opportunity to set out the strategic orientations and positioning of the PMLB for the coming years. This included reaffirming the ambition of the members to strengthen the model of cooperative metropolises in the Loire-Brittany area, in close alliance with medium-sized cities and rural territories, to make the Grand Ouest region shine while being an accelerator for territorial transitions.

This vision is shared around the twofold purpose of the PMLB: (1) to be an identified stakeholder in the development of the Loire-Brittany territory, (2) to be a territorial laboratory for cooperation in the service of transitions.

In concrete terms, these major orientations are translated into an action plan for 2023, notably in terms of accessibility, logistics, economic promotion and culture. This roadmap was adopted at the April 2021 meeting of the trade union council.

The reciprocity contract with the Pays de Retz: fruitful cooperation

Signed in 2019, the reciprocity contract with the Pays de Retz focuses on four main components: food, mobility, economic development and tourism. 2021 was devoted to the implementation of this approach, including the development of the roadmap for the economic component.

THE INNOVATION AND DIGITAL TECHNOLOGY MISSION

Digital tools have become part of our daily lives. They've become indispensable and are profoundly changing how we work, consume, get information, communicate and question our way of being a society. The Covid crisis contributed to the amplification of this dynamic, while also raising economic, health, ethical and environmental questions. It highlighted the risk of social, generational and geographic divides caused by the generalization of digital practices.

The ambition of Nantes Métropole is to propose and support, with the territory's stakeholders, a responsible, socially and ecologically sustainable digital strategy, to make digital advances a source of social progress, an ecological requirement, as well as a source of sharing and cooperation for as many people as possible.

Several flagship projects in 2021 reflect this ambition: the data strategy, actions to support digital mediation and the 8th Nantes Digital Week.

Digital mediation

Coordinating a network of digital mediation professionals

Following on from the work carried out in collaboration with the PING association, Nantes Métropole led the digital mediation network. 4 meetings, in person and by videoconference, were held with stakeholders in the field working to support users in their digital practices in different fields of action: digital technology and access to rights, digital technology and access to employment, development of digital culture, support for young people (school and extracurricular time).

To date, there are about a hundred structures, both public and associative, working in the field of digital mediation on a metropolitan scale.

These meetings have 2 objectives: share current mechanisms and projects (calls for projects, positioning and linkage, project review) and co-construct new ones (tools, events, etc.).

The development of a network of France Service Digital Advisers

In connection with the recovery plan, the State launched a call for projects intended for the recruitment and training of digital advisers within public and private structures. These positions are designed to support users in their digital practices, with an emphasis on access to rights.

Nantes Métropole is taking part and has positioned itself as:

- an information relay for municipalities and associations;
- an initiator of a consultation alongside the Prefecture in conjunction with associations (community digital mediation network) to work on the territorial network, mainly in the city's priority neighbourhoods (QPV) and to make recommendations to the State;
- a support for co-financing by the City of Nantes for Nantes associations in the city's priority neighbourhoods (QPV).

A total of 20 France Service Digital Advisers were recruited and trained throughout the territory so as to provide support to metropolitan residents.

Supporting digital mediation professionals through training

Nantes Métropole, with its partner the CoNumm Hub (a consortium of public and associative stakeholders working on the development of digital mediation), experimented with a training programme for social action professionals affected by the problems of digital inclusion.

Entitled "For a common digital culture of social workers", this 3-day training was offered to the Nantes Métropole Community Centre for Social Action (CCAS).

Equipment of the digital mediation actors

- **Reprint of the Digital Practices Guide**

This guide, intended for users, lists the public and association structures of Nantes Métropole, i.e. some 100 actors working in the field of digital mediation (from simple Internet access through to the fablab). This tool, updated with the territory's actors, was reissued in September 2021 and is available in public facilities and digital mediation structures.

- **Deployment of training vouchers (Aptic Pass)**

In partnership with the Departmental Council and with the support of the State, the Conumm Hub, and the MSA Loire-Vendée, Nantes Métropole has been rolling out the Aptic digital passes since November 2020. This system enables the population to access a digital support service in certified digital mediation locations.

Nearly 500 booklets of 5 passes worth €10 have been distributed throughout the Nantes Métropole territory, mainly in the departmental solidarity spaces and CCAS, **in an effort to support the public in approved digital mediation locations.**

Data strategy

Data is increasingly present in daily life and in the management of cities. Everyone is concerned, whether as a citizen, an employee or a user of public or private services.

In 2019, Nantes Métropole chose to define a strategic framework on this matter, which presents multiple ethical, legal and economic issues. It has drawn up the first charter setting out ethical principles to protect its citizens and to regulate the use of data in its local area.

In 2021, the second year of application of the Metropolitan Data Charter was marked by the launch of numerous actions:

- the implementation of the data charter in public procurement so as to promote the operational implementation of commitments in terms of transparency, trust, sovereignty and data protection;
- the development of a popular education programme on data, in partnership with Accoord, in order to raise awareness among parents and teenagers about the protection of their data and to train digital advisers;
- the community's continuing compliance with the General Data Protection Regulation (GDPR);
- the use of data for public policy purposes, including: data visualizations on bicycle use (to show their potential, to promote their understanding and reuse); the publication of exposure measurements to electromagnetic waves available on the open data portal of Nantes Métropole, etc.;
- a contribution to national and international discussions on digital issues and data use (Salon de la Data, active participation in the national Interconnectés association and the international association of French-speaking mayors, partnership with the City of Montreal, etc.).

This approach represents a proactive commitment by the Community to anticipate, regulate and establish a protective and responsible framework for data, as well as a space for dialogue with the players in the area.

Nantes Digital Week

Nantes Digital Week - "the week of digital culture of all kinds" - was created in 2014 with the aim of offering a time for reflection, contribution, training, practice, creation and exchange on matters of digital technology and its associated challenges.

The purpose of the event is to embody and demonstrate the plurality and density of what local actors are conceiving, creating and achieving in the digital field.

- gatherings in various formats (lectures, workshops, exhibitions, etc.);
- discussions among various groups (researchers, students, artists, start-uppers, VSE/SMEs, large groups, specialists, associations, insiders and lay citizens, etc.);

- a programme put together in collaboration with local stakeholders (companies, associations, researchers, schools, etc.).

In 8 years, Nantes Digital Week has developed into a major event that brings together a steadily growing number of contributors and attendees.

From 16 to 26 September, 144 events (half of which were aimed at professionals and the other half at the general public) were organised by 335 project leaders.

In total, 30,800 participants were able to train, learn, have fun, build, and meet each other over the course of 10 days around the achievements and projects made possible by the many uses of digital technology in our lives.

INSTITUTIONAL PARTNERSHIPS

Nantes Métropole has nurtured a longstanding collaborative relationship with its institutional partners in Europe, France, the Pays de la Loire region and Loire-Atlantique département.

These partnerships provide a means of ensuring that the various local public policies are consistent, coordinated and complementary.

In 2021, despite the health crisis, Nantes Métropole continued its work as part of these partnership arrangements, enabling our partners to contribute to the financing of our projects.

2021: a year of transition and recovery

With the State and the Pays de la Loire Region, exchanges made it possible to finalize the various revitalization steps. As such, Nantes Métropole signed a protocol of intent with the State in February 2021 for a metropolitan contract for recovery and ecological transition, that notably led to a grant of an additional €11.3 million for Nantes Métropole and the City of Nantes under the 2020 and 2021 Local Investment Support Grant (DSIL).

The applications submitted to the Region under the regional fund for the revival of inter-municipal investment made it possible to allocate an additional €4 million, of which 30% for the municipalities, and the applications submitted for React EU (European recovery plan) €3.8 million on digital issues, energy transition and active mobility.

Discussions on the future State-Region Plan Contract (CPER) 2021-2027, disrupted in 2020 by the health crisis, were extended to 2021 and should be completed in 2022.

The Department's decision in 2020 to close the support system for territories that had been in place since 2017, in order to provide the municipalities and inter-municipalities with a new framework for intervention in 2021, notably focusing on issues of mobility, solidarity, culture and sports, as well as urban requalification of town centres and city centres in municipalities with fewer than 15,000 inhabitants. School projects will also be supported in municipalities with fewer than 15,000 inhabitants and in priority education networks.

The main financial support mechanisms mobilised by the community

The major financial partners of Nantes Métropole include:

- The State, via the DSIL, with credits increased in 2021 by the France Relance plan and a specific envelope for the energy renovation of public buildings (DSIL known as "thermal"). Nantes Métropole and the City of Nantes received €5.26 million from the State from the DSIL 2021 grant to finance the purchase of articulated buses, the development of a reception area for travellers, the rehabilitation of a water treatment plant and the Haubans neighbourhood centre. For the city of Nantes, €4 million of DSIL "thermal" funds will support the energy renovation of three schools and of the Manufacture.

Nantes Métropole and the City won several calls for projects under the France Recovery Plan: the “brownfield” fund, the digital transformation of communities (for User Relationship Management and Digital advisers), the thermal rehabilitation of social housing, the territorial food project and the Quartiers Fertiles...

Nantes Métropole was also declared the winner of the “Dedicated bus lanes” call for projects in the total amount of €20.08 million for the CETEX Babinière and the development of new tram lines.

- The Department, whose new support system for inter-municipal areas is now linked to the schools fund and the AMI Cœur de bourg. 2021 was devoted to consultation, the definition of shared priorities and the identification of projects in conjunction with the conurbation’s municipalities.
- The Region, which dedicated 2021 to the redesign of its contractual policy. Its financial support was provided through the intermunicipal investment stimulus fund.
- The European Union, through the European structural funds managed by the State and the regional councils. The Pays de la Loire Region continued to consult with its partners, including Nantes Métropole, for the drafting of the ERDF, ESF+, and YTF 2021-2027 operational programme.

A COMMUNITY DIALOGUE THAT NURTURES A SENSE OF METROPOLITAN CITIZENSHIP

2021 was an opportunity for the President of Nantes Métropole and for the metropolitan elected officials to reaffirm the importance of and commitment to greater involvement of citizens and stakeholders in the decisions that concern them. This commitment, which is now reflected in a metropolitan citizenship pact adopted in October 2021, reinforces an action carried out for several years to debate public policies and metropolitan projects in order to support transitions.

Despite a difficult health context, 2021 was also a period of intense dialogue with citizens, particularly on controversial issues.

The Metropolitan Citizenship Pact to guarantee the quality and effectiveness of participatory processes

The Commitment and Proximity law enacted in 2019 introduced new provisions. At the start of the mandate, it encourages Nantes Métropole to question its links with the municipalities on the one hand; and the linkage between public action and citizen participation, on the other hand. On this last point, the Metropolitan Council chose to draft a citizenship pact, over and above the regulatory obligations. It was voted on 8 October 2021 and, along with the Code of Ethics and the Governance Pact, is one of three approaches that integrate the fundamentals of an integrated dialogue.

The development process for the Metropolitan Citizenship Pact was based on a group of metropolitan elected officials chaired by Christelle Scuotto-Calvez, Vice President, Citizen Dialogue and Metropolitan Citizenship, and Pascal Bolo, Vice President, Finance, Public Policy Evaluation, General Affairs and Special Police.

The pact was formulated as the fruit of work carried out between March and September 2021, fed by interventions from actors and/or communities, as well as by expert contributions (studies, diagnoses, assessments) in order to provide an external perspective.

The Citizenship Pact marks a new and important step that makes the intermunicipal level a place of citizenship in its own right. This document constitutes a political and managerial reference framework. It formulates the values and commitments for a participatory and civic-minded metropolis that recognises, promotes and supports metropolitan citizenship so that:

- citizens can participate in the drafting of decisions that concern them;
- citizens are able to debate the major changes within the territory;
- citizens are supported in their ability to act and implement initiatives of general interest.

The Metropolitan Citizenship Pact identified 5 goals for citizen participation, 12 principles to support the democratic quality of the processes and their effectiveness (timeliness, inclusion, plurality and diversity of viewpoints, deliberation, distancing, accountability, transparency, etc.) and 7 opportunities to exercise metropolitan citizenship, including the right of inquiry as a new offer.

This pact is publicly available on the institutional website of Nantes Métropole and is the subject of a more communicative translation in the form of a.

A citizens' convention to decipher experiences of the crisis and citizen aspirations for tomorrow

Launched in November 2020, the citizens' convention is the mechanism chosen to bring together citizens and local stakeholders to produce an appraisal of the Covid crisis and the aspirations of inhabitants. The aim is also to formulate proposals that can feed into the draft mandate following the pandemic.

After four months of debates, proposals and hearings of actors of the territory, the 80 members gave and presented their citizen opinion in March 2021. This opinion gives a "360°" view of the Covid crisis by addressing 16 selected topics.

The citizen's opinion states that there are different experiences, including a relationship to telework that is liberating for some and has no impact on social ties; while being a factor of isolation and stress for others. The feeling of security was also strengthened or damaged by the crisis, depending on the individuals and the places where they live... Nevertheless, the 80 members described shared experiences: emotional and affective insecurity, growing inequalities, excessive fragility in the health system, difficulty in accepting national decisions, comforting outbursts of solidarity, a new relationship to work and an opportunity to change habits.

At the end of this reflection, the Nantes citizens' convention expressed 12 aspirations and lessons for building the Nantes Métropole of tomorrow according to 4 types of expectations:

- a solidarity-based metropolis: (1) Living more closely with the elderly, (2) Supporting young people who are strongly affected by the situation, (3) Identifying and breaking the isolation of people weakened by the crisis, (4) Preserving the public health service, (5) More power to act for citizens and associations;
- a metropolis that creates new ways of living within the territory: (6) Making more room for nature in the urban environment, (7) Developing accessible, hybrid and mixed housing;
- a metropolis that informs and protects its inhabitants: (8) Being better informed, being better equipped, (9) Feeling safe;
- a metropolis that encourages transitions: (10) Consuming more locally, (11) Rethinking and balancing work, (12) Moving differently.

Starting in March 2021, the elected officials of Nantes Métropole and the municipalities examined, during 3 seminars and with the support of the services, the opinion of the convention in order to give a first level of answers and commitments on 7 July 2021. In the end, there are 90 projects to be "opened" or "accelerated" that Nantes Métropole has undertaken to carry out in response to the crisis and to the recommendations of citizens.

In its response, Nantes Métropole commits itself to five orientations with concrete translations:

- #1 a metropolis that cares for and protects its residents. This is reflected in the creation of a proactive public health policy or the expansion to the metropolitan level of the fight against violence against women, with attention to the children involved;
- #2 a resilient and ecological metropolis, where living together well is possible. This can be seen in the promotion of intergenerational housing solutions or the implementation of the "open space plan" and the establishment of a wilderness area in each public green space and new development programmes;
- #3 a metropolis that connects inhabitants and territories. This is reflected in the implementation of a digital solidarity package (with support for digital practices, a connection offer and low-cost equipment via a channel for the reuse of digital and reconditioned equipment) or the development of a user relations charter;
- #4 a metropolis of transitions and uses of tomorrow. This includes the organisation of collective catering by local producers or by supporting the creation of cooperatives for isolated and precarious workers as a response to job insecurity;
- #5 a citizen and participatory metropolis that continues to involve citizens in the processes and projects carried out by the Community, for example, with the organisation of a debate on the model of the city of tomorrow.

The opinion of the citizens' convention as well as the commitments made in response to it are contributing to the construction of public policies.

What place for advertising in the city?

On the occasion of the development of its first metropolitan-wide local advertising regulations (RLPm) and to continue the first stage of advertising reduction (2017, renewal of street furniture contract), Nantes Métropole held a broad debate on advertising in the city from December 2020 to April 2021, in an effort to respond to landscape, ecological transition, ethical and economic issues.

Beyond and in parallel with the regulatory consultation for the RLPm, it was intended to initiate a debate in an effort to rebalance the points of view on a controversial subject.

A randomly selected group of citizens (13 women and 15 men from 13 Nantes Métropole municipalities) was mandated to make recommendations on the proper place of advertising in the city: what would be the “right place” for advertising in the city? What issues need to be considered in order to define this “right place”? What are the priorities? In response to these issues, what are the possible solutions? With which tools? At what rate?

With the support of information from various sides, objective data (deciphering document and hearings of experts on the 4 debate topics), contributions by citizens and actors (nearly 350 people contributed to this debate through stakeholder projects by being invited to answer the questions of the citizen group “less advertising but more useful advertising” and by participating in public meetings), the citizen group was able to produce an opinion submitted to the Community on 21 April 2021. This group had questions about the form and content of advertising (beyond the RLPm) without totally doing away with advertising but with reduced and more useful posting, local and more creative.

As a result of this debate, in December 2021, elected officials committed to a new management of the advertising space: proactive, balanced and shared. By 2024, 24 flagship actions and commitments will be implemented, including:

- the removal of 1,000 structures throughout the Nantes Métropole territory;
- discontinued roll-out of the digital panels specified in the street furniture contract (46 panels);
- a ban on all advertising within 50 metres of schools: kindergarten through secondary school;
- all structures turned off overnight, from midnight to 6 AM: signs and shop windows, billboards, etc.;
- increasing the visibility of institutional and cultural information;
- the creation of a “billboard advertising” section in the “*Nantes dans ma poche*” (Nantes in my pocket) application.

Nantes Métropole is mobilising structural levers with the development of its first RLPm, co-constructed with the mayors and applicable in the 24 municipalities, the start of renegotiation of the contract for the supply of street furniture and the mobilisation of the police power of mayors in order to enforce the new rules.

New horizons for the tramway... episode 2

To accompany the development of the metropolitan urban core area and the public transport network, Nantes Métropole announced the commissioning of three new tram lines in June 2019. This large-scale project was the subject of a preliminary public consultation, from 26 October 2020 to 24 January 2021. To this end, two guarantors were appointed by the Commission Nationale du Débat Public (CNDP), to ensure the smooth running of the democratic process. They submitted a report on the consultation on 24 February 2021.

This consultation was intended to present the project in detail and answer questions from the general public, to listen to comments and to gather opinions. Throughout the consultation period, Nantes Métropole offered key moments to discover the project (300 people participated in the 3 public meetings with video recording; 4 virtual walks - workshops; telephone hotlines, 3 mediation sites, a dedicated page on the citizen dialogue platform with 14,000 visits) and various contribution possibilities: 1,748 digital contributions / comments and 88 stakeholder projects.

All of these opinions were posted online on the Nantes Métropole digital space for citizen dialogue and **a summary was drafted in the fall of 2021.**

Nantes Métropole made commitments:

- **starting on April 2021**, by deliberating on the launch of complementary studies on line 8 and the public transport structuring network, but also on the principle of involving a citizens' panel for the designation of the team in charge of the design and realisation of the Anne-de-Bretagne bridge. The citizen workshop for the transformation of the Anne de Bretagne Bridge was launched in November 2021;
- **on 16 December 2021**, during a public meeting, by presenting a response to all citizens recommendations that explains the provisions for the extension of tramway lines 6 and 7, the creation of an electric busway line 8 from Bouguenais to Doulon, the reinforcement of the public transportation network (extension of the chronobus line, new transfer points), the increase of the supply of parking in park-and-ride lots and the development of the bicycle network.

ECOLOGICAL TRANSITION AT THE HEART OF ALL CONSIDERATIONS

For this new 2020-2026 mandate, the ecological transition is more than ever at the centre of concerns, along with equality for all and social justice. On the one hand, it is the continuous acceleration of subjects such as clean and sober mobility, climate, renewable energies, energy renovation, access to energy for all, the circular economy and the eco-responsibility of Nantes Métropole. On the other hand, there are growing challenges to be met: adaptation to climate change, health and the environment, regaining biodiversity, healthy and sustainable food for all, responsible economic change and the impact of digital technology.

The elapsed year provided an opportunity to establish a new strategic framework for the ecological transition in Nantes Métropole, inspired by the national roadmap of the 2030 Agenda, the French translation of the 17 United Nations Sustainable Development Goals. This framework poses 5 reference topics: carbon sobriety and adaptation to climate change; production and consumption models that are economical with natural resources and sustainable; reconquering biodiversity; health and environments that are conducive to good health; safe, healthy and sustainable agriculture and food.

This reference framework and its implementation must serve to set the targets and objectives of the ecological transition, to nurture all public policies in their contribution to the ecological transition and to ensure evaluative monitoring and the degree of progress of these objectives.

The sustainable development report is now structured around this framework. The last report was presented to the Metropolitan Council meeting on December 2021.

In terms of carbon sobriety, the last BASEMIS® inventory of greenhouse gas emissions in the territory published in 2020 indicates that between 2003 and 2018, energy consumption relative to the number of inhabitants dropped by 12%. However, the continuously growing number of inhabitants over the period (+22%) still means a 7% increase of energy consumption. In order to achieve its stated objectives, in April 2021, Nantes Métropole adopted a true energy planning strategy, namely the Energy Master Plan (SDE).

The work of the Open Conference on Energy Transition was also delivered in June 2021, thereby providing an evaluative follow-up of 6 of the 33 commitments of the energy transition roadmap. Also noteworthy is the recognition of the city's progress in this area with the award of the highest existing European label, Cit'ergie Gold.

2020 and 2021 saw the continuation of operational actions such as energy renovation, the development of heating networks, the shared energy contract with the municipalities or the local energy management intervention service to fight against fuel poverty. In terms of mobility, measures taken in 2021 will help to reduce the carbon footprint, such as free public transport on weekends, the purchase of new trams and the extension of the network, or the expansion of the Neustrie P+R. On the subject of climate adaptation, new urban planning operations, such as Pirmil-Les Isles, which is experimenting with construction in a flood zone, or the ZAC Bas Chantenay, are taking resistance to climate change into account.

In the field of sustainable production and consumption, the objective of Nantes Métropole, namely to achieve 50% of the territory's consumption covered by local renewable energy by 2050, resulted in 2021 in the continuation of the "Sunshine" plan. Its aim is to consolidate the initiatives already under way for several years in the solar energy sector: solar land registry, support for 15 large private installations of useful roofs, but also projects of citizen collectives...

An experiment on the separated collection of food waste from 1,700 households in Nantes, as well as actions to combat food waste, are among the highlights of 2021. The roadmap on the circular economy is being rolled out with stakeholders and initiatives involving the selective deconstruction of buildings, increased sorting and recovery of construction waste, or with the drafting at regional level of a guide on circular public procurement. The Corporate Social Responsibility (CSR) platform continued its actions, notably with the development of the ParcoursRSE website that aims to offer support and solutions to friendly companies or CSR ambassadors with some thirty large member companies.

On the recovery of biodiversity, 2021 made it possible to deepen the knowledge on these issues, by

continuing the partnership work with naturalist associations and the realisation of the biodiversity Atlas. The Avoid, Reduce and Offset strategy was also implemented in 2020 and 2021, along with support for better consideration of wetlands as part of metropolitan projects. Nantes Métropole is also continuing its programme to restore waterways and aquatic environments, pending the revision of the Loire Estuary Water Development and Management Plan (SAGE) scheduled for 2022.

The news for 2021 is also the implementation of the guide plan “Trees and forests of tomorrow”, a document that sets a framework for developing the place of trees within the territory. It concerns the three “experimental” sites of the urban forests, other sectors of Nantes Métropole in the 2030-2050 timeframe and the ongoing management of the forestry plan. In addition, there are many awareness-raising activities on biodiversity aimed at a diverse public, notably in schools.

In the field of health and environments conducive to health, Nantes Métropole is working on global approaches to improve the quality of living environments, notably with regard to air and emerging risks: Health, Safety and Environment Regional Plan “3”, Local Health, Safety and Environment Action Plan for the Nantes Métropole territory, Atmosphere Protection Plan. Regarding the installation of mobile phone towers in its local area, Nantes Métropole is working with the stakeholders concerned to implement a charter on the terms and conditions for installing radioelectric stations.

The Covid crisis also served as an accelerator for Nantes Métropole in terms of its ambition to quadruple bicycle travel by 2030. More than €1.1 million of grants were awarded in financial aid for the repair or purchase of an electrically assisted bicycle in 2020 and the first quarter of 2021. Temporary facilities (including the famous “coronatracks”) installed during the first lockdown were mostly made permanent in the subsequent months, supported by an entire assessment process involving citizens. New bicycle lanes were created in the heart of the city (Guist’hau sector, Versailles quay, etc.) and the parking offer was increased, in particular with the Cyclostation at the North Station. Finally, the guidance in this domain resulted from the adoption on 12 February 2021 of the Nantes Métropole bicycle routes master plan that maps out a future metropolitan network of 635 km.

In terms of food and agriculture, the Nantes Métropole roadmap or the Territorial Food Project (PAT), adopted in October 2018, was broken down with quantified objectives. These will be prioritized in 2022, at the end of the mandate, when the public food policy will be formalized. In terms of agricultural production, Nantes Métropole and its partners (Chamber of Agriculture, GAB44, Cap44, Terres de Liens) supported some thirty project leaders in 2021, via a permanent call for expressions of interest. This resulted in about 15 installations.

In addition, we also note in 2021:

- nearly €160,000 of aid were directly paid to farms for installation or clearing while notably promoting organic agriculture;
- the continued roll-out of the “Sensibio” initiative undertaken by the GAB44 with 20 farmers;
- several urban agriculture experiments (in Nantes neighbourhoods), both emerging and in the consolidation phase, with an ecosystem that is taking shape and economic models to be reinforced;
- As part of the Conference of EPCIs (Public Establishments for Intercommunal Co-operation) of the Loire Atlantique, a working group co-piloted by Nantes Métropole and the Federation of Municipalities of Nozay with the support of the MIN and the AURAN, laid the foundations of a strategy of sectors for access to quality food for all;
- Several animation and facilitation mechanisms were implemented:
 - “TAP workshops” to share issues and practices between elected officials and metropolitan and municipal services;
 - meetings of the Metropolitan Council of Food Stakeholders sessions that are preparing a 2022 production;
 - support for some twenty projects led by associations or communities as part of the recovery plan;
 - strengthened cooperation with other territories (Pays de Retz, preparation of the Departmental Council’s PAT, etc.);
 - The Territorial Conferences on Agroecology and Sustainable Food, which Nantes Métropole will host on 12 and 13 September 2022, are being prepared.

Sustainable public procurement

The impetus given in 2017 to sustainable public procurement by the scheme to promote responsible purchasing (SPAR) continued its consolidation in 2021 in a context still marked by the health crisis. This did not prevent Nantes Métropole from integrating social and environmental considerations into its procurements, in accordance with the guidelines defined by the SPAR. The main vector for integrating social considerations is inclusion, with nearly 300,000 hours achieved in 2021 through public procurements.

Moreover, each contract is carefully examined to see how best to integrate sustainable concerns. For example, each sourcing operation leads to an exchange with the economic sector concerned, in order to measure its maturity. The specifications are adapted accordingly. This requirement and methodology aim to progressively reach the objective that the Climate and Resilience Law sets for public procurements: integration of the environmental value of offers for 100% of the contracts.

This objective is one of the major focuses of the new generation SPAR, effective under the new mandate, in effect as of 2022.

8 axes have been defined for the new SPAR: environmental health, carbon sobriety, adaptation to change, economical management of resources, food, nature issues, employment, integration and responsible economy, equality, non-discrimination, responsible digital technology.

The energy axis is of particular significance in terms of sustainable procurements, through the purchase of supplies and their consumption requirements (response to the most demanding Energy Star certifications for electrical and IT equipment, etc.) or with regard to facilities associated with Christmas lights and light shows. In the same vein, the public property maintenance sustainability programme is continuing its efforts to control energy consumption. Finally, the Community is contributing to the development of renewable energy production facilities, either through its electricity purchases by requiring packages that use renewable sources, or by including solar power facilities in construction projects.

In addition, in response to the changes taking place in the area of sustainable public procurements, Nantes Métropole initiated a series of discussions with the main organisations representing the region's economic players. This approach will take shape in June 2022 with the adoption of an initial commitment charter. The aim will be to integrate environmental and social issues into public procurements in a concerted manner with the Loire Atlantique departmental federation of public works. Exchanges are also underway with other players in the economic world.

In 2021, in an uncertain economic and health context, the public order showed more marked attention to the economic world and to the companies of the territory by facilitating the pre-financing of contacts through advances (2/3 of the recipients of public contracts are located in the Pays de la Loire).

THE COMMUNITY PROJECT

Development of the 2020-2026 community project with a collection phase involving city employees

The general management wished to begin the new mandate with a collection phase involving city employees by means of complementary mechanisms: a quality of life at work barometer (questionnaire and qualitative workshops), an online suggestion box and free expression via postcards available at the various workplaces.

The questionnaire launched in November among all employees of the City of Nantes, Nantes Métropole and CCAS (i.e. 8,640 employees) was well received with 3,979 respondents, i.e. an overall participation rate of 46%.

Employees also expressed themselves via 400 postcards, and the 7 online proposals generated 3,736 views.

This phase made it possible to: collect positive points and points for improvement from the community; freely express opinions, disappointments, anger or pride; generate numerous proposals.

An unprecedented process of examination and feedback to city employees on their proposals

The work of grouping the 2,323 collected proposals led to a summary list of 373 proposals.

The relevant departments examined each of these proposals during the second half of 2021. This resulted in a response document for city employees.

The feedback to city employees indicates what the community has or has not selected, and the proposals already implemented or scheduled during the mandate around 15 themes. Also mentioned are non-scheduled ideas that could be tried out or that need further study. In addition, the few unsuccessful proposals were explained.

Please note that the document posted on the intranet at the beginning of January was distributed to the departments in paper form.

A project scheduled for completion in the first half of 2022

The 2020-2026 community project must define both the ambition for our community and the road ahead. In particular, it focuses on internally embodying the six markers of the territory's project.

It is based on the expression of city employees, but also on other analyses (end-of-term assessment, lessons learned from the crisis), resource strategies and the orientations set by the Mayor-President at the beginning of the mandate.

The first half of the year will enable us to finalize while validating the key actions to be carried out during the mandate, before sharing it widely and launching its implementation in September 2022.

A CITY OPEN TO THE WORLD

The territory's international and European opening is a major challenge for the Nantes conurbation. Nantes Métropole relies on both its values and its projects to maintain and boost its attractiveness. With the help of various local stakeholders, the authority forms close partnerships with other major cities abroad.

The Community is also committed to its partner cities in Africa, Brazil and the Caribbean, while contributing to the efforts to respond to the global challenges related to sustainable development defined by the UN. In this area, the aim is to improve and sustain the actions carried out for the benefit of inhabitants.

Continued partnerships with Quebec

In recent years, Nantes Métropole has forged very close ties with Quebec and consequently been able to develop a variety of projects in the two areas. These projects heavily involve our digital ecosystems, our cultural establishments, our research and development centres and our companies. Sharing experiences and approaches helps to define and implement more efficient public policies.

These partnerships have been established largely through exchanges and structuring projects such as:

- the **cooperation between Nantes Digital Week and MTL CONNECTE**, with in 2021:
 - a delegation from Nantes, both remote and in person, during MTL CONNECTE;
 - 26 participants from Nantes, 7 speakers and 3 artists scheduled, 3 workshop on Nantes-Quebec exchanges;
 - meeting of about twenty Audacieux (territorial ambassadors) and round table organised by the School of Design (60 participants).
- the **collaboration on the Nantes metropolitan data charter** and the Montreal digital data charter.

Four projects supported by Nantes Métropole and selected as part of the France-Quebec decentralised cooperation (FFQCD) call for projects for 2021-2023 were selected:

- the **association of Nantes Digital Week (NDW) and Printemps Numérique** (organiser of the MTL CONNECTE digital week), with:
 - the production of a series of video interviews with Nantes and Montreal women to highlight the diversity of digital professions and women's careers and to challenge preconceptions;
 - the drafting of a joint Nantes-Montreal manifesto (publication date: October 2022), in the form of a cross-view that would prefigure a desirable digital future.
- **Samoa and the Quartier des spectacles partnership:** the project aims to develop joint actions to organise the implementation, coordination and evaluation of a creative installation in the public space aimed at raising public awareness of climate change issues;
- **Arkham - Rhizome collaboration:** the Arkham sur Loire association, in association with Rhizome in Quebec City, continued the transmedia and transatlantic project "Conte des Estuaires Nantes-Québec", with a third chapter in 2020.
- the **association between the Compagnie Yvann Alexandre and the Maison pour la Danse Québec**, around the dance project "ARCHIPEL".

In terms of the economy, highlights included:

- 30 Quebec prospects monitored, mainly tech start-ups, CCI, AI, etc.;
- business establishments in 2020/21: Osedeo, Green Link, Ideate Medical;
- the launch of the network of ambassadors in Montreal "Les Audacieux de Nantes Saint-

Nazaire du Québec”.

Delegations from Quebec, with:

- The arrival of the Quebec General Delegate in Nantes in July 2021:
 - inauguration of the exhibition “Les Intelligences”,
 - meetings at the Lieu Unique, VAN, etc.;
 - exchanges with elected officials: Johanna Rolland, Francky Trichet, Aymeric Seassau.
- participation of the digital spring during the NDW with the 4 young Montrealers selected for the FFQCD project:
 - welcoming of Québec International;
 - welcoming of leaders of FFQCD cultural projects.

In terms of cultural activities, highlights included:

- A collaboration between the Maison de la Poésie and Rhizome, and the continuation of the residency exchange project;
- the continuation of the Maison Pour l’Architecture project, which is part of the FFQCD, with financial support from the French and Canadian governments.

Finally, highlights in the academic sector included:

- the integration of the Nantes University Hospital into the Mother and Child Network for the French-speaking world (following the example of several university hospitals in France). Within this framework, the agents of the University Hospital regularly participate in the activities supported by the network (annual symposium, training courses, etc.);
- the regular hosting at the university hospital of Quebec medical trainees as associate trainees, from different universities and Quebec integrated health and social services centres (CISSS) (Montreal, Quebec, Rimouski). In 2021, welcoming of a fellow (resident, intern) from Laval University in Quebec City.

A presence in French-speaking exchange networks

As part of the International Association of French-speaking Mayors (AIMF), highlights included:

- the participation in the general assembly held in Tunis;
- the ongoing collaboration on the data charter;
- two meetings of the “Innovative Cities” commission were held in Nantes during the Data and Interconnected Exhibition.

What Nantes Métropole and its partners are doing in Africa and Haiti

• Coherence of activity since 2012

Nantes Métropole continued its North-South and South-South cooperation with three partner local authorities: Dschang (Cameroon), AMAGA (Association des Maires de la Grand’ Anse en Haïti) and Kindia (Guinea). The aim is to support the structuring of communal or inter-communal services and their sustainable development in consultation with the inhabitants and the national authorities. The exchange of experiences between the four local areas is a major asset. Inter-municipal organisation, access to drinking water and sanitation, waste management, promotion of local and organic agriculture and the production of hydroelectric power are all areas in which projects are developed in collaboration between local areas (with the financial support of partners such as the French Development Agency, the

Ministry of Europe and Foreign Affairs, and the International Association of Francophone Mayors).

This approach is yielding results: Dschang has a municipal agency that maintains and develops the municipality's water and electricity infrastructure. It also relies on its municipal waste management agency to collect and sort household waste, and to produce and sell the compost it produces. Its approach is becoming inter-municipal, notably to develop a viable and ecological sanitation service. For its part, Kindia is working to define and finance its strategy for access to drinking water, in conjunction with the national association of municipalities in Guinea and the cooperation between Boffa and Charente-Maritime, so as to contribute to a national development.

- **Urban services international cooperation fund**

Thanks to the Oudin-Santini law, Nantes Métropole can mobilise up to 0.5% of its water and sanitation revenues to support municipal and inter-municipal cooperation in its territory for access to drinking water and sanitation. It has extended this support to other issues, including the UN Sustainable Development Goals: namely waste management, natural risk prevention, combating climate change, and cities' resilience.

The objectives are, on the one hand, to strengthen cooperation between the municipalities of Nantes Métropole and their partner cities, and on the other hand, to respond to humanitarian emergencies linked to natural disasters.

In 2021, Nantes Métropole supported cooperation between Carquefou and Matéri (Benin), Rezé, Saint-Herblain and Ronkh (Senegal), and La Chapelle-sur-Erdre and its three partner communities from Poland, Romania and Palestine.

Moreover, it granted aid to AMAGA (Haiti) for a post-emergency project, still under development, in the fields of water and sanitation.

- **Supporting the energy transition and the sustainable city**

The City of Dschang, with the support of Électriciens Sans Frontières and Nantes Métropole, continued the programme to roll out Dschang's municipal policy on renewable energy. It consists of equipping the city with micro hydropower plants and managing a public service to produce and sell clean, affordable and reliable energy.

A waste management project is also in progress, focusing on the roll-out of an individual and municipal composting service in Dschang and its intercommunality (SYCOME). At the same time, Nantes Métropole is striving to collect and recycle organic household waste. This cooperation is a tool to raise the awareness of the inhabitants of both territories on the issue of organic waste and to recognise and promote citizen or economic initiatives in this field.

These two projects receive financial support from the French Development Agency.

The reliability of the management of these services is encouraging other partners to develop projects with Dschang: the Cameroonian government, the European Union and Italian and Swiss cooperative efforts. Similarly, in Guinea, the EU has extended its waste management improvement programme (SANITA) to Kindia, which has a water and sanitation agency.

Finally, thanks to the support of the International Association of Francophone Mayors and Nantes Métropole, Dschang and SYCOME determined their method for managing

sludge from on-site sanitation. Implementation will begin in 2022 under a new agreement between the four partners. Kindia also initiated this process with the same partners, which should result in an action plan in 2022.

- **Support from Nantes Métropole for local governance**

Faced with the current social, economic and ecological challenges, cities and towns must ensure that many public services meet the needs of their inhabitants and ensure their sustainability. Nantes Métropole supports the organisation of local communities and the recognition of their role. This is particularly true in Haiti where local development and access to essential services require the involvement of the inhabitants and their local representatives. In coordination with the Brittany region and the City of Nantes, Nantes Métropole is supporting the structuring of the Association of Mayors of Grand'Anse (AMAGA), so that local elected officials are more involved in the development of their inter-municipal territory, in conjunction with the Haitian State and NGOs.

Nantes Métropole and Recife

After signing a letter of intent with the City of Recife at the end of 2019, thereby formalizing their desire to submit a joint project under the "Financing Facility for French Communities" (FICOL) scheme promoted by the French Development Agency (AFD). This project was finally selected by AFD in 2020 and will receive funding of €600,000 over 3 years. Nantes Métropole worked throughout 2021 to implement this ambitious cooperation programme.

Entitled "Urban Innovation and New Urban Core Areas", this project, with project management delegated to SAMOA, focuses mainly on the sharing of good practices. The aim is to encourage collaboration between partners in the fields of sustainable and inclusive urban development, the creative economy and, more generally, the Smart City.

Notably structured around cross-missions between Nantes and Recife, the project schedule was strongly impacted by the health context and the impossibility to travel. Video-conference exchanges (steering committees, bilateral meetings, etc.) However, the partnership dynamic was maintained, with the first delegation from Recife being welcomed in Nantes in April 2022.

Local action by Nantes Métropole

- **Supporting international associations**

In 2021, Nantes Métropole provided financial assistance to four local partners active in the field of its cooperative efforts:

- Inti: conducting initiatives to promote solar energy, economical energy and development in emerging countries;
- Compost In Situ: promotion of organic waste composting, notably through the preparation of a third African seminar on the subject and the hosting of a Cameroonian trainee on citizen waste initiatives;
- Electricians Without Borders: contributing to the project to roll out micro-hydropower plants in Dschang;
- Secular solidarity: Flagship NGO of the associative cooperation between Couëron and Grand'Anse; post-emergency aid following the earthquake of 14 August 2021 in southern Haiti with support for the shelter operation and psychological support for young earthquake victims and their families.

- **Participation of Nantes Metropole in the United Cities and Local Governments (CGLU) network**

Nantes, which became a member of the CGLU Executive Bureau in 2019, in addition to its seat on the World Council, is continuing its commitment to the CGLU. However, the mobilisation conditions within the network were strongly impacted by the health crisis, thereby causing all of the events to be organised remotely.

PLAYING A KEY ROLE IN EUROPEAN NETWORKS

Nantes Métropole plays a key role in European networks, leveraging its relations with numerous European stakeholders to underpin its lobbying strategy. This strategy helps to raise Nantes' profile in Europe, which is a strategic springboard for its international development: 80% of the trading operations by companies in the local area take place within Europe.

The relations formed within Europe provide an opportunity to take other European cities' experiences on board, highlight the success stories in Nantes and raise the local area's profile while defending the challenges faced by local authorities at European level. This strong presence in Europe is also a useful tool for obtaining EU funding, which is a powerful accelerator for the area's projects.

Nantes Métropole in Europe: playing a key role in networks

Thanks to its active role in European networks and its relations with continental institutions, Nantes Métropole can make its voice heard in Europe on strategic issues: social and territorial cohesion, local public services, education, culture, climate change and responsible economic development. As such, it has an influence on European decision-making processes and ensures the defence of the interests of its territory.

A presence on this scale is vitally important, since 75% of national legislation stems from European law today. Accordingly, decisions made at European level have a direct impact on local public policies.

In 2021, despite the health crisis, activities were able to continue online, which made it possible to maintain a strong network dynamic, fruitful exchanges and a significant presence with the European authorities.

EUROCITIES

The Eurocities network, consisting of some 130 European cities with a population of over 250,000, was presided over by Nantes Métropole from November 2014 to November 2016. Since 2017, Nantes has continued to play an active role in the governance and political influence of Eurocities. Nantes Métropole now focuses its involvement on:

- social cohesion, public service and corporate social responsibility (CSR);
- European contributions to the issues raised by the transitions currently under debate in the metropolitan area (i.e. social, economic, democratic, ecological and digital);
- the development of synergy at local level, by strengthening EU ties with the citizens and stakeholders of the local area.

While continuing to lobby European institutions, Nantes Métropole also remains active through the following special-focus forums:

- the Social Affairs Forum, which follows on from the initiatives conducted on social cohesion, employment, public services and CSR. The forum also promotes the European pillar relating to social rights and the United Nations' 17 Sustainable Development Goals.

In this context, the Community has defended the demand for an inclusive and fair recovery, notably at high-level events such as the Porto Social Summit in May 2021, which led the Heads of State and Government to adopt a declaration on strengthening social Europe.

In November 2021, due to the pandemic, the Berlin Forum had to go online while focusing on inclusive recovery through social innovation, as well as green and digital skills development. This event was also an opportunity to present the local commitment for enabling the most vulnerable people to access essential services.

Nantes Métropole participates in the working groups (WG) on education, migration, employment, Roma integration, reduction of homelessness and urban ageing. It also contributes to the projects: "Cities4CSR" regarding the promotion of CSR by cities; "ON BOARD" in the field of innovation in education;

- the Economic Development Forum, chaired by Nantes Métropole (2019-2020), works primarily in the fields of innovation, CSR and new forms of economy in general (circular

economy, sharing economy, social and solidarity economy, etc.);

- the Culture Forum, of which Nantes is vice-chair of the Working Group on art in public spaces;
- the Environment Forum.

Nantes Métropole's ongoing action can also be seen in the following cross-cutting Working Groups:

- Creative Citizenship: by co-chairing this working group with Munich and Paris, Nantes is involved in mobilising citizens around the idea of Europe, through enhancing and exchanging their lengthy experience in this area, as well as the organisation of two European webinars;
- Public services and public procurement: Nantes Métropole represents the network's cities in the Urban Agenda Partnership on Innovative and Responsible Procurement, which aims to use public contracting as a tool for cities' overall strategy and sustainable development. This also allows it to promote the initiated approaches and to influence European legislation on the subject;
- Cohesion Policy, to defend the role of cities with regard to the structural funds.

AFCCRE / CEMR

The Association Française du Conseil des Municipalities et des Régions d'Europe (AFCCRE) brings together some 1,500 communities, municipalities, departments, regions and groups of municipalities. The Council of European Municipalities and Regions (CEMR) brings together national associations, including the AFCCRE. Nantes Métropole sits on the committee of the AFCCRE / CEMR, which is tasked with assisting and advising municipalities in their European activities and initiatives, such as searches for information, contacts and funding for their transnational projects. It carries out ongoing monitoring of EC legislation so that local and regional authorities can anticipate the consequences at local level.

On 8 of October 2021, jointly with the AFCCRE and the Maison de l'Europe, Nantes organised the "Jumelages: mode d'emploi" (Twinning: user guide) day. This training enabled Nantes Métropole elected officials, technicians and twinning committees to exchange on the possible action methods, animation of relations and good practices.

SIG Europe (formerly CEEP)

Nantes Métropole is a member of SIG Europe, the new name since December 2020 of the European Centre of Employers and Enterprises responsible for providing public services (CEEP).

Several Nantes-based local semi-public companies (Sociétés d'économie mixte) and local public companies (Sociétés publiques locales) are also involved: SEMITAN, the Cité Nantes Events Centre, Nantes Métropole Aménagement and the Wholesale Agricultural Produce Market (MIN).

This organisation, a partner in the European social dialogue, defends general interest service companies in Europe, particularly in the context of the post-COVID economic recovery. It also works in the field of CSR.

Following on from the presidency of SIG France since December 2015, the SEMITAN has been chairing SIG Europe since December 2020. This presidency enables it to promote the values of a quality public service accessible to all, notably thanks to its privileged access to European institutions.

The special partnership with Hamburg

In 2017, Nantes and Hamburg signed a multi-sectoral partnership agreement for the 2017-2020 period. The operational implementation of this ambitious agreement has since made it possible to support a large number of cooperation projects between partners in the two areas, particularly in the fields of economic development and culture.

Despite the health context, 2021 was marked by a reaffirmed desire to look to the future and to strengthen cooperation. As a testament to this momentum, a virtual conference presenting the relations between the two territories was organised on 22 January on the occasion of Franco-German Day. It brought together political representatives from both cities, the French authorities in Hamburg and more than 160 participants from the economic, cultural and academic worlds.

In the cultural field, Nantes Métropole provided support to the Nantes-based association Mapp NTS,

through the granting of an exceptional subsidy of €3,000 for the production in Hamburg of a poetic video-mapping work to celebrate the signing of the Élysée Treaty and, more generally, the Franco-German friendship.

The metropolises of Nantes and Hamburg increased their exchanges with a view to concluding a new strategic cooperation agreement, which should be signed in 2022. The Nantes stakeholders involved in the partnership with Hamburg are fully involved in these discussions through a steering committee led by Nantes Métropole.

A EUROPEAN AND INTERNATIONAL CITIZENSHIP PROGRAMME

Nantes Métropole's desire to interact more fully with Europe and the international community can be seen locally through its offer for inhabitants of a fully-fledged European and international citizenship programme that allows the inhabitants of the conurbation to benefit from the opportunities offered by foreign experience.

This goal is also achieved through the set-up of events and schemes that encourage an interest in Europe among the people of Nantes, and through the support of Nantes Métropole for a number of associations that are helping to develop a sense of citizenship with a global outlook.

Sharing European and international issues with citizens

Active European and international citizenship requires a good understanding of the issues raised by Europe and globalisation in our local area. In this way, Nantes Métropole offers opportunities to think about and discuss topical issues, by inviting European and international personalities and experts to debate with its inhabitants.

- the Festival of Europe (9 May 2021): as in 2020, this event has been reinvented in the context of the health crisis by offering a remote programme on the topic of travel (broadcasting debates, concerts and games on its social networks throughout the event);
- 9th edition of the "Geopolitics of Nantes" (24 and 25 September 2021): for the 9th consecutive year, the Institute of International and Strategic Relations (IRIS) and the Lieu Unique offered citizens a programme based on ten round tables according to a protocol adapted to the health crisis.

International solidarity event "AfriqueS à Nantes" 2021

Nantes Métropole has many associations, professional structures and citizens that work every day to highlight the richness of the world, whether cultural, artistic or heritage. With the support of the actors of its territory and in response to the national initiative "Season Africa 2020", the City of Nantes and Nantes Métropole hosted from 15 July to 17 December 2021, a rich programme of events and meetings on the theme of Africa. Mobilising more than 40 associative and institutional stakeholders, this key moment illustrated for 6 months the creative and federating energy driven by the African continent.

Despite the health context, "AfriqueS à Nantes" valued the diversity of the international solidarity actions carried out across Nantes Métropole, in the domains of cooperation and international action. 34 events were organised on one or more days, combining festivals, concerts, screenings, round tables, dance shows, etc. Activities aimed at children and young people were carried out during school and after-school hours.

Nantes Creative Generations: making young people the focus of Europe

The Nantes Creative Generations (NCG) initiative was launched by Nantes Métropole and the City of Nantes in 2009 with a dual objective: boost Nantes Métropole's visibility at European level and turn Europe into an attainable reality and an opportunity for young people.

Cancelled due to the health crisis, the annual forum, NCG on Tour and the cooperation award have been postponed.

A remobilisation event around NCG was organised: 36 young people from Nantes Métropole took part in Europa Mix in October. Building on their aspirations, they put forward proposals for the future of Europe. This event was part of the Conference on the Future of Europe.

Europe in Nantes: a breeding ground for associations

Based on the belief that Europe should be an opportunity that people experience for themselves, Nantes Métropole supports local associations that raise awareness of Europe and its challenges. The city supports associations that run a range of exchange schemes between citizens in Nantes and their

counterparts across Europe, such as:

- La Maison de l'Europe, which informs citizens and raises their awareness of European issues, also guides local project owners and helps them give their projects a European reach;
- Euradio, the European radio/school that continues to expand listeners' knowledge of European news and issues while at the same time spreading Nantes Métropole's reputation and influence in Europe. Although the station's development slowed down in the context of Covid, this did not prevent it from broadcasting to new cities: Paris, Marseille, Bordeaux, Toulouse, Nice. In 2022, four more cities will be added: Tours, Orléans, Rennes and Angers;
- The European Cultural Centre and its binational cultural centres (Franco-German, Franco-Spanish, Franco-British and Franco-Italian), which are tasked with raising the visibility of the various European cultures in the conurbation;
- Graine d'Europe, Gare de l'Est...

As a reminder, Europa Nantes is a 1,000 m² space, inaugurated in September 2019, designed to strengthen ties between the inhabitants of Nantes, Nantes Métropole and Europe. Bringing together the main European associations of the local area, on a site which is open to the general public, Europa Nantes is dedicated to education, experimentation and the creation of projects with a European dimension. Europa Nantes is managed by the Maison de l'Europe.

Despite the health crisis, Europa Nantes has asserted itself as a resource centre on European issues by multiplying its initiatives, mainly online (debates, conferences, meetings), and by continuing its mission to inform and raise awareness on European issues.

TOURISM IN TRANSITION

For a long time, Nantes has had the image of a rather indistinct and unknown city for tourists. Close to the chateaux of the Loire and the Atlantic coast, it has many assets and points of interest (heritage, architecture, history, culture, wine and gastronomy), without being known and recognised for any particular reason.

However, over the last twenty years or so, the sleeping beauty has managed to reinvent itself by taking a different look at the world. Today, it stands out for its creativity, originality and cultural effervescence, making it the “loopiest city in France”, as described by the English newspaper *The Sunday Times* in 2014. Nantes has thus managed to build the identity of a singular city, criss-crossed by art, but also of a serene city where life flows along peacefully.

By building up this image, Nantes has managed to find its place among other tourist destinations, as a city that is ambitious but not pretentious, a city that is extravagant but not overwhelming.

With the health crisis, as for all destinations, the tourism sector has been heavily impacted, but it has nevertheless demonstrated its ability to bounce back.

Leisure tourism: another year still strongly marked by the health crisis

In the space of 20 years, Nantes Métropole has become one of the most vibrant and inventive cities in France. A large number of sites, creations, events and activities usually take place throughout the year, some of which are of international importance: *Le Voyage à Nantes*, *La Folle Journée* (a classical music festival), *Estuaire* (a permanent open-air collection of contemporary art between Nantes and Saint-Nazaire), the mechanised animals and monsters of the *Machines de l'Île*, the Castle of the Dukes of Brittany and many more.

But for the past two years, as elsewhere, the tourism sector, especially urban tourism, was hit by the health crisis. This context notably led to administrative closures of establishments open to the public, event cancellations, curfews, restrictions on attendance numbers, closures or restrictions on the opening of borders, etc.

However, a partial lifting of the restrictions, thanks to the vaccination campaign, allowed schools to reopen at the start of the summer of 2021, with new constraints: flow management, verification of the health pass, reinforced hygiene rules, etc.

Within this framework, summer activity was maintained, partly thanks to the programming of one of the main summer events (*the Voyage à Nantes*) and the opening of important sites for visits (castle, *Machines de l'Île*, Art Museum, etc.).

In addition, there is a permanent offering for tourists with the “*Voyage Permanent*”, the “*Parcours Estuaire*”, the “*Voyage dans le Vignoble*”, and the “*Traversée Moderne d'un Vieux Pays*”, which is relevant and resilient in times of crisis.

In 2021, we note the following highlights:

- an enrichment of the *Voyage à Nantes* collections with new artistic creations; for example, “*Le Pied, le Pull-over et le Système digestif*” by Dewar & Gicquel in the outer harbour of Saint-Nazaire or the “*Parfum de Nantes*” by Bertrand Duchaufour;
- the 10th edition of the summer event “*Voyage à Nantes*”, from 3 July to 12 September, marked by the monumental works “*Le Naufrage de Neptune*” by Ugo Schiavi in the Place Royale and the “*Versus*” playground by Titan in the Place Graslin; It should be noted that, once again, the “*Nuit du VAN*” and “*Nuit des Tables de Nantes*” events could not be scheduled.
- the installation of the “*Caméléon*” in the *Galerie des Machines*, drawn from the artistic world of the Heron Tree, contributed to the appeal of the site of the *Machines*. More than 433,000 people were received in 2021, despite the long closure periods and reduced capacity;
- a reinforced tourism local promotion campaign around

Lake Grand-Lieu, in partnership with the Department, the 10 riverside municipalities and their inter-municipal organisations;

- bicycle tourism, with a 1st edition of the “*Nantes en roue libre*” guide and “*La traversée*”

moderne d'un vieux pays à vélo”;

- participatory tourism, with support for the participating associations.

- support for 13 municipalities to assist the operation of 13 local tourism sites, for a total amount of almost €153,000;
- support for 2 municipalities to assist the investment in 2 local tourism sites, for a total amount of almost €40,000;
- the delivery of the pre-studies of the Heron Tree, the preparation of the purchase contract for the work of art and the construction of elements of the bestiary, such as the chameleon and the hummingbirds;
- the cancellation of many events, but some major events that usually punctuate the cultural and tourist life of Nantes could be proposed: the Folle Journée, the cultural programmes of the Naves...

Given this context, better performances were seen in 2021, with increased admissions and overnight stays compared to 2020, but without returning to 2019 levels. Of special note:

- more than 1.9 million overnight stays in market accommodations from January to October 2021 (source: tourist tax and Airbnb), i.e. +12.5% compared to 2020 (-33% compared to 2019);
- A recovery of attendance at tourist sites, although below 2019 levels: +8.4% at the Machines de l'Île compared to 2020 after 7 months of closure (-42% compared to 2019), +15% at the Castle of the Dukes of Brittany (-51% compared to 2019);
- French tourists made a significant contribution to this performance, partly offsetting the absence of international clients (10% of the total in 2021 compared to 30% in 2019).

In 2021, Nantes Métropole, notably thanks to the “Voyage à Nantes”, once again demonstrated its ability to adapt. Today, Nantes Métropole is a recognised destination for urban tourism, but also for its art and culture at national and European level.

In times of crisis, the strategic choice in recent years to expand the collection of permanent artworks and installations accessible to all in the public space (for example, on the Green Line route) has proven its relevance.

2021 was also marked by the work undertaken with SPL le Voyage à Nantes to renew the public service delegation for the management and implementation of the 2022-2026 tourism policy. Fuelled by the “Tourism of the Future” symposium (organised on 6 and 7 September 2021 in Nantes), the elected officials of Nantes Métropole defined the mandate’s strategic orientations:

- to consolidate Nantes as a European-level tourist destination, with culture and creativity as levers of tourism development;
- to involve the destination in a responsible tourism development (reduction of the sector’s ecological impact, distribution of flows in time and space, etc.);
- to design and promote a unique and sustainable offer to both external visitors and residents, on the scale of the metropolis and of metropolitan cooperation;
- to engage in a new prism of destination assessment and performance.

Business tourism, strongly impacted by the health crisis

The business meetings and events sector (professional and general public trade fairs, conferences, seminars) generates significant economic benefits for all tourism stakeholders and in particular hoteliers.

According to calculations by France Congrès, Nantes’ Cité des Congrès and exhibition centre generate €259 million in annual benefits for the local area.

Like leisure tourism, this sector was heavily impacted by the Covid crisis: postponed or cancelled events, implementation of attendance restrictions and of the health pass. Almost no large-scale events could be held during the 1st half of 2021. The effective recovery began in September, although restrictive measures were maintained.

Key figures for business tourism in 2021

- ⑩ **Cité des Congrès:** 80 MICE (Meetings, Incentives, Conferencing, Exhibitions) events, about 40 cultural performances.
- ⑩ **Parc des Expositions exhibition centre:** 4 shows produced and 14 hosted, 29 competitions, 4 corporate events.

In 2021, the Convention Bureau, which is housed within the Nantes Saint-Nazaire Development Agency and is responsible for promoting the destination in the “business” segment on the national and international levels, strengthened its position and expanded its service offering to its members.

The governance of the network of actors was revisited around several thematic panels (sites for private hire, agencies, etc.). Event organisers can use it to select their local suppliers: hotels, sites for private hire, caterers, events agencies, service providers, restaurants etc. The Bureau des congrès coordinates the network of actors jointly with the Nantes Saint-Nazaire Chamber of Commerce and Industry.

In addition, Nantes Métropole supports the development of its local area’s sectors of excellence by supporting economic, tourist and scientific events with national and international influence.

In 2021, despite the persistence of the health crisis, some 20 events were able to be organised (approximately 15 in the ECO & ESR domains, and seven at the University of Nantes, within the framework of the “Campus Nantes” Convention). One of these events, the “Serbotel 2021” contest, took place at the Parc des Expositions exhibition centre, while 8 others took place at the Cité des Congrès in Nantes.

Heavily impacted in 2021 but resilient, tourism continues to adapt to the health crisis by strengthening two existing areas of work: local tourism and sustainable tourism:

Thus, Nantes is recognised as a reference destination in terms of sustainability, notably through 3 labels: GDS Index (dedicated to business tourism), Cit’ergies (for which tourism will be one of the major subjects to reach the Gold level), and Sustainable Innovative Destination (for which Nantes is one of the 9 pilot cities).

A CULTURAL POLICY WITH A STRONG FOCUS ON INNOVATION

The objective of Nantes Métropole is to implement an ambitious cultural policy that engages fully with the idea of building community spirit and developing the territory. This approach is based on an exacting vision of culture as a means of individual and collective empowerment and as a free space in which a society can reinvent itself through interaction.

By sharing with a broad audience and making room for innovative ideas from near or far, a particular focus is placed on the capacity for innovation and diversity, whether that be in the way culture is experienced, in creative process or in cultural projects.

2021 will have been marked by the health crisis affecting the cultural offer of the facilities managed by the administration. However, during this period, Nantes Métropole maintained and reaffirmed its ambition in terms of culture with a diversified offer accessible to the greatest number.

A continuity of activity, attendance and far-reaching cultural offers for metropolitan facilities

- At the **Castle of the Dukes of Brittany and its Nantes history museum**, 2021 was marked by the closure of the facility until 19 May. Nevertheless, 840,272 visitors passed through the doors of the Castle, of which 223,582 visitors to the History Museum, including permanent and temporary exhibitions and the artistic programme. They included 14,300 group visits, including 11,000 school visits.

In spite of the context, the Castle offered several highlights and exhibitions:

- the event “*Expression(s) décoloniale(s) #2*” and its exhibition of Romuald Hazoumè (19/05-14/11) attracted 738,318 visitors in the courtyard and 72,888 within the Museum;
- the attendance of the exhibitions “*Toshihiro Hamano*” and “*Abîme*” in the 2nd half of the year, reached 32,463 visits;
- the Heritage Days and “*Women’s Heritage*” days allowed new proposals to be developed, such as the “*garden of Anne de Bretagne*” prefiguring a journey / creation system that could be exploited for the future cultural programming.

2021 was also marked by special press coverage that highlighted the establishment’s exhibitions with the major issues of identity today.

- The **Memorial to the Abolition of Slavery** recorded 123,000 visitors (+8% compared with 2020). The Crypts of the Cathedral have not, to date, reopened following the building fire on 18 July 2020.
- At the **Chronographe**, the establishment was able to offer a rich programme throughout the year; the exhibition “*Glass in all its glory*” (29 May - 7 November 2021), the exhibition *Lucky Archaeology* (4 December 2021 - 2 January 2022) and numerous events.
- **At the Musée d’Arts**, 2021 was obviously marked by the museum’s closure, that was extended to 18 May 2021.

During these five months, off-site activities and digital mediation content helped maintain the link between the museum and its visitors.

Of particular note is the *Connivences* project, that continued in class with the CE2 pupils at the Jacques Tati and Ledru Rollin schools and an exhibition of reproductions from *L’Âme de la forêt* at the Jardin des plantes from 24 April to 15 June, enhanced by a treasure hunt designed by the Jardin.

The museum’s website also offers six new art tutorials inspired by works in the collections; five videos of “mini-visits” on the same topic; five videos on women artists.

After the reopening on 19 May 2021, two exhibitions were again held:

“*United States of Abstraction. American Artists in France, 1946-1964*”. Installed in February, it could not be extended beyond 21 July. Indeed, it had to move to the Fabre Museum in Montpellier. Nevertheless, it attracted 38,657 visitors in Nantes.

On the other hand, the “*Hypnosis*” exhibition could be seen until 19 August, and even until 12 September for the installation of Tony Oursler in the Chapel of the Oratory. The exhibition was admired by 76,186 visitors. It was also an opportunity for several new experiments, including a virtual version of the exhibition (3D capture, enriched with a variety of contents) proposed on the museum’s website. It was then accompanied by a live visit and a French sign language visit (accessible to the deaf public in partnership with Culture LSF).

- The **Natural History Museum** reopened to the public on 19 May 2021, with limited attendance.

- Its current events in 2021 included a rich programme of exhibitions:

“*Néandertal*”, extended until 10 May 2021 at the museum. This exhibition was also adapted in a reduced version consisting of 14 panels presented on the gates of the park of La Gilière, in La Chapelle-sur-Erdre. It is part of the off-site exhibition programme. A film was made about the exhibition.

“*Intelligences, différentes par nature*” opened on 3 July, an exhibition created by the Nantes Museum, the Espace des Sciences in Rennes, the Quebec museums of Saguenay and Sherbrooke and Science by Art. It was recognised as being of national interest by the Ministry of Culture. Presented until 2 May 2022, it was a great success. This exhibition is indicative of the museum’s desire to strengthen the existing links with the Espace des Sciences de Rennes and with museums in Quebec.

“*Le Règne du silence*” and “*Noir comme Vénus*”: these 2 artistic exhibitions completed the programme of temporary exhibitions hosted in the museum garden.

Doctor Paper “Nantes Ville Imaginaire”, a participative work of the lockdown.

“*Art Salish*” and “*IN-DE-GE-NI-ZE*” exhibitions realised in connection with the 40th Anniversary of the Nantes-Seattle twinning.

- The Museum’s programme also included various events:

“*The Night of the Museums*” / 535 visitors; “*European Heritage Days*” / 1 733 visitors; “*Nantes Digital Week*” / 716 visitors; “*La Fête de la science*” / 2,775 visitors; “*Nature Nomade, 5^{ème} festival nantais des grands voyageurs*” / 4,331 visitors; “*Lucia spectacle son et lumière sur la façade du muséum*” / 12,000 visitors.

- A sustained acquisition policy with the entry of a remarkable work:

The meteorite of Saint-Aubin completes the rich collection dedicated to the museum. A varied programme was provided with activities for all audiences (families, children, teenagers, schoolchildren, people with disabilities).

- The **Jules Verne Museum** reopened its doors to the public on 20 May. It gradually returned to the same levels of attendance as in the 2015-2019 period, before the health crisis (with even a 3.25% increase in July and August). The development and opening of the terrace and garden, which extend and enhance the visitor’s experience, contributed to the museum’s renewed appeal. Among the new features, a “Vernian” plant trail, with its spaces and mediation opportunities, was inaugurated by a lighting display during the Night of the Museums on 3 July 2021.

In this context, the offer of guided tours was also reviewed and adapted. The new “15-minute tour of Jules Verne” formula, based on the life and work of the writer in the various visitor areas, was an immediate hit. Due to the success of the event, it was extended to Sundays and then to school vacations.

- The **planetarium**, which turns 40 in 2021, had a special year: closure for works but also a strong recovery of the post-Covid visitor numbers.

The work initiated in 2020 was completed in the first half of 2021 with a reopening to the public for the summer period on 3 July. They served to extend the capacity to 59 seats (to

accommodate 2 classes simultaneously) and to increase the capacity to accommodate 10,000 additional visitors per year.

A relocation of the mediators' control room, as well as an access vestibule for the room, completed the refurbishment of this space (walls, floor and replacement of the original chairs). Work was also undertaken to bring the ventilation system up to standard so that it could be reopened to the public in complete safety. The facilities are designed to provide an optimal welcome for visitors (comfort, acoustics, circulation and management of unforeseen events during entry and exit).

During the months of closure, the off-site activities, developed during the lockdown, were consolidated. The planetarium reached out to 5,003 visitors from January to June, either in schools (just over 2,000) or during online events (almost 3,000 connected).

Upon reopening, the public returned in even greater numbers with 35,996 visitors from July to December (+27.1% compared to the same period in 2019 before the crisis). Over 2021, the planetarium had an attendance of 40,999 visitors (in 2019, before crisis, attendance of 56,837 visitors).

2021 was an opportunity to experiment with new formats for attracting the public. An exhibition on the outside railings traced the history of the Nantes planetarium, from its initial design to the present day. A partnership with the planetariums of Paris and Lyon made it possible to launch cross-residencies of artists via a national call for projects. It resulted in the production of a work mixing art and science that was presented during the Nantes Digital Week and the Scopitone festival (14 performances, 724 spectators). This partnership has been renewed in 2022 with new artists.

As a result of the groundwork laid during the lockdown, several projects came to fruition. For schools, a more complete offer based on cycles and programmes enabled us to better adapt to their needs. In September 2021, the rates were also aligned with the more attractive rates of the Musée d'Arts: (from €90 to €40 per non-metropolitan class, from €90 to €30 for metropolitan secondary schools, free for schools in the metropolis), in order for the planetarium to regain its position on the educational and cultural level. As a reminder, in 2019, only 39% of the welcomed school children were from the Nantes Métropole territory. In 2022, an assessment will be carried out to analyse the evolution in terms of attendance.

Within a similar partnership in terms of development framework of the Scientific, Technical and Industrial Culture (STIC) within the territory, the planetarium, through its label as a Regional School of Astronomy and with its status of regional "Sky Watch" relay, has built an offer of training and astronomy courses on several topics and for different ages (Little Dipper course, 1st star, Meteorites, etc.). In 2022, the programming of these courses for the general public will take place in limited numbers. The offer will then be proposed to teachers and other audiences.

The new planetarium website will be online in January 2022, replacing the single dedicated page hosted on the Nantes Métropole website. It has already met with some success and offers more than a hundred educational resources for teachers and organisers.

New archaeological discoveries in 2021

The Nantes Métropole archaeological research teams took charge of 16 preventive archaeology assessments and conducted 2 excavation operations in 2021, deployed in 6 municipalities of the metropolitan territory.

In Nantes, in the neighbourhood of Doulon / La Louëtrie, a first intervention carried out on 2 ha led to the emergence of a farm that evolved over a period of three centuries. Founded in the 4th century before our era, the rural establishment is delimited by an enclosure formed by broad embanked ditches. It was abandoned at the beginning of the 1st century before our era. This excavation gives relief to the current urban project, which is now home to new vegetable farms.

Also in Nantes, in Saint-Félix, a second intervention was carried out at the Fellonneau school. It revealed part of another Gallic enclosure founded in the 1st century before our era, then abandoned nearly 2000 years ago. Located on a promontory overlooking the Erdre, the site was strategically positioned to control the river. Several hypotheses as to its purpose can be put forward: defensive, economic, cultural, privileged

habitat of an aristocratic type,... These Gallic remains are the oldest known near the Nantes city centre before the foundation of *Condevicnum* (Gallo-Roman city that preceded Nantes) in ancient times.

Restitution of the inventory of heritage sites on the banks of the Loire

As part of the commitments for the Loire resulting from the great citizen debate, *Nantes, the Loire and us*, Nantes Métropole, in partnership with the heritage department of the Pays de la Loire Regional Council, conducted an inventory of heritage sites on the banks of the Loire between 2017 and 2021. Two researchers surveyed the territory for 4 years in order to identify all elements explaining the links between the territory and the river: 1,500 elements were identified for the urban core area and 2,250 for the metropolitan area. The study made it possible to analyse the river landscape according to the evolution of the course of the Loire and the human transformations, and to understand the urbanization and the built-up area of the banks while completing the knowledge of the uses linked to the presence of the river.

During 2021, the inventory data was published on the websites patrimonia.nantes.fr and desrives.paysdelaloire.fr. In addition, a compilation was organised on 19 January 2022 in the form of two mini-conferences with the themes “*L’histoire des ports de la Métropole*” and “*L’habitat des rives de Loire*”. 113 people (technicians, elected officials, volunteers from associations in Nantes Métropole) attended the videoconference. A second occasion is scheduled for 31 May 2022 in the form of workshops that demonstrate how the data from the inventory can be used for different types of projects.

A scientific and cultural project confirmed for the Castle of the Dukes of Brittany, the Nantes History Museum and the Memorial to the Abolition of Slavery

In 2021, work began on the public services delegation for the management of the Castle of the Dukes of Brittany, the Memorial to the Abolition of Slavery and the Cathedral Crypts in connection with the Voyage à Nantes. This contract covers the period 2022 to 2026.

It provides new scientific and cultural orientations and defines an institutional project based on:

- the commitment of a citizen museum in keeping with the ambition of the various cultural actions undertaken thanks to its educational and pedagogical missions open to all;
- an ambitious programme of temporary exhibitions that enable visitors to explore the history of the region, the memories of Nantes and other civilisations;
- the more extensive integration of the Memorial of the Abolition of Slavery by considering it as an extension of the history museum on the issue of the slave trade and its abolition;
- a visit and experience that, despite the dark pages of the history of Nantes, must remain a pleasure for all;
- the affirmation of social responsibility including the follow-up of a roadmap; for example, professional integration, promotion of soft mobility, commitments to ecological and energy transitions in buildings, compliance with the territorial climate-air-energy plan (PCAET), the circular economy, the territorial food project (PAT).

Key figures in 2021

In the context of the health crisis and resulting closures, the metropolitan cultural facilities welcomed:

- Nantes History Museum (at the château): 223,582 visitors including permanent and temporary exhibitions and artistic programming.
- Musée d’arts: 126,597 visitors, down slightly from 2020.
- Natural History Museum: 76,000 visitors during the 202 days when it was open to the public (from 1 January to 19 May, limited attendance opening from May to October). Daily attendance was 376 visitors.

- Planetarium: 40,999 visitors to the Planetarium, including 5,003 “outside the walls” visitors during the months of closure from January to June, either in schools or during online events. The reopening of the establishment after a year and a half of closure was highly anticipated: 35,996 visitors from July to December.

- Chronographe (archaeological interpretation centre): 10,307 visitors;
- Jules Verne Museum: 20,109 visitors from 20 May to 31 December, i.e. an average of 2,810 visitors per month.
- Memorial to the Abolition of Slavery: 123,000 visitors

SUPPORTING ELITE SPORT

Elite sport is an essential factor behind the appeal of the local area. With this in mind, Nantes Métropole manages the local area's sports facilities, supports clubs and high-level sportsmen and women, and contributes to the organisation of sports events on a metropolitan scale.

Promoting and developing the sporting elite

In 2021, professional sport in Nantes Métropole, an almost unique landscape in France, continued to bring together many large-scale clubs. 7 professional teams were supported:

- Nantes Football Club;
- HBC Nantes (men's) and Neptunes de Nantes (women's handball);
- Volley Ball Nantes (women) and Nantes Rezé Métropole Volley (men);
- Nantes Basket Hermine (men) and Nantes Rezé Basket (women).

In terms of sport, the highlights in 2021 included:

- the victory in the European Cup of the Neptunes of Nantes (first European title of a club from the territory, all disciplines included);
- the relegation of Nantes Rezé Basket to League 2;
- 4 clubs took part in the European Cup in 2020 / 2021 (HBCN, VBN, NRMV and Neptunes).

Other than with regard to sport, 2021 was marked by:

- the impacts of the health crisis: although sports competitions were held, most of the season was played behind closed doors;
- creation of the sports company "Neptunes de Nantes" (former Nantes Atlantique Handball), whose main shareholder is Réalités;
- merger between the 2 Rezé women's basketball clubs (NRB and Basket Club Saint-Paul): following its relegation to League 2, the NRB became the Club Saint-Paul Nantes Rezé Atlantique Basket (CSPNRAB).

Alongside these professional clubs, there are two "amateur" clubs firmly rooted in the local area and competing at the highest levels of their disciplines: Nantes Métropole Futsal and Nantes Métropole Athlétisme.

Finally, 2021 was marked by the Olympic and Paralympic games in Tokyo. 7 athletes from the territory participated in this event (2 at the Olympics, 5 at the Paralympic Games) during which Ronan Pallier won a bronze medal in the Paralympic long jump.

Nantes Métropole supports professional sport through the allocation of subsidies and the purchase of communication services, for a total amount of €5.5 million. It also provides specific support for elite athletes (25 elite athletes as at 1 November 2021). These sportspeople, who feature on the register of elite and senior sportspeople drawn up by the French Ministry of Sport, represent France at international competitions in around 12 disciplines. The support provided (€75,000) was used to purchase adapted equipment as well as for international travel. In addition, athletes who participated in the Olympic and Paralympic Games in Tokyo received an additional support of €3,000.

1) Sporting facilities in Nantes Métropole

Due to the health situation, 30 events that were to be held in the metropolitan sports facilities were cancelled or postponed.

The Beaulieu Sports Centre (PSB)

Built in 1973, the largest indoor sports stadium in Nantes completed its transformation initiated in 2016 (rehabilitation and modernization) with the development of the concourse in summer 2021.

Despite the health context, the HBCN was able to play 25 matches. The Nantes Métropole Futsal is

now a resident of the PSB, with 12 matches organised in 2021. In addition, 2 boxing galas, 1 circus show and 1 session of the City of Nantes Council took place there.

The Pierre Quinon Stadium

This specialised facility, equipped with a 200 m ring track, a central track, jump areas and 18 badminton courts, hosted numerous athletics competitions, both regional and departmental. However, due to the health situation, the French Athletics and Fencing Championships were cancelled. On the other hand, a European championship of adapted sports was held there in March 2021.

The Trocardière Metropolitan Sports Hall

This sports hall specialising in basketball accommodated approximately 40 matches of the leading clubs, namely the Déferlantes (women's club) and Nantes Basket Hermine (men's club).

The Petit Port Ice Rink

The only ice rink in the department, the skating rink forms part of the Petit Port sports complex and welcomes a diverse audience, including associations, schools and the general public. This is where the Nantes Corsaires, who play in the D1, usually sell out their matches.

In 2021, the health crisis impacted the attendance rate with the closure of public sessions until 9 August (work was also planned for the summer period). Since the opening, the size of the public using the facility has been reduced.

General public attendance, above 100,000 admissions in 2019, was 60,336 admissions in 2021 (56,233 admissions in 2020, also a non-significant year).

Supporting major sporting events

The events sector was very much affected by the health context, which prevented the holding of many sporting events (marathon, European boxing gala and other events in the XXL Hall). However, the following events will be hosted in an adapted format, after being deferred to the end of the year:

- the Odyssey race / walk on 7 November;
- the Elephant Run and the Half Marathon on 13 / 14 November;
- 3 international level handball matches of the HBC Nantes at the XXL Hall from 7 to 15 December (more than 27,000 spectators welcomed for all 3 matches).

DEVELOPING HIGHER EDUCATION AND RESEARCH

Higher education, research and innovation (ESRI) are the fundamental foundation for increasing individual and collective agility within Nantes Métropole, creating economic value and successfully managing societal transitions within the territory. Higher education and research institutions are working with their communities to find concrete solutions to the challenges of student life and the ecological and digital transition in the city. Cooperation between these two worlds is increasing in order to improve public action, better train future generations and produce innovations that will benefit the economic world.

In terms of Higher Education and Research, the Nantes Métropole strategy is based on different levers: national measures (Planning agreement between the national and regional governments (CPER), Future Contract, PIA), measures of the ESRI Regional Plan (Connect Talent, RFI, etc.), Nantes Campus contracts with ESR establishments in the Nantes Métropole territory, support for foundations and associations, and assistance for scientific events.

CPER 2021/2027: reaffirming the ambition

Following the memorandum of understanding signed between the State and the Region on 22 January 2021, the CPER reinforces the common priorities given to the major topics that are the subject of the 2021-2027 contract. Nantes Métropole elaborated and negotiated its support as a co-financer of real estate and research equipment projects.

Nantes Métropole participates by contributing to the development of metropolitan higher education, excluding rehabilitation or energy transition operations that remain the responsibility of the State, owner of the premises. It takes part in building and equipment pooling operations in accordance with the Nantes Campus approach and is particularly interested in projects linked to the territory's strategic sectors (Health, Food, Future Industry, Maritime, Digital and Cultural and Creative Industries (ICC)), "cross-border" projects, and initiatives that reinforce the Community's major projects (University Hospital District / Bas Chantenay / IRT Jules Verne).

Nantes Métropole has committed support of €36.6 million to the ESRI component of the 2021/2027 CPER, as a supplement to the State and the Pays de la Loire Region (overall amount of projects identified as structuring and priorities of nearly €141 million in the Nantes Métropole territory).

Campus Nantes: the metropolitan ESR plan

Following the approval of the Campus Nantes strategic orientations in June 2014, the implemented governance is divided into three bodies, a plenary conference, site commissions linked to the various campuses located in the territory and thematic commissions. This animation dynamic, on stand-by since the health crisis, was relaunched in 2021.

Thus, a plenary session bringing together institutional and academic players met on 30 March 2021, in the presence of Fabrice Roussel, the new ESR Vice President. On the five sites registered with Campus Nantes, committees were set up for: Géaudière, Tertre-Lombarderie, City Centre / Île de Nantes and Chantrerie-Fleuriaye, PIIJV (Pôle Industriel d'Innovation Jules Verne: IRT Jules Verne / Bouguenais-Saint Aignan). For the latter, the committee met in May 2021 around the site's major issues, the current status of projects and new arrivals, the accessibility of the campus.

Agreements for each site feature among the initiatives arranged as part of the Campus Nantes drive implemented by Nantes Métropole. Each covering three years, they are designed to establish a contractual relationship with virtually all of the ESR (higher research institutions) in the Nantes conurbation. As such, they pursue and step up Nantes Métropole's support by financing initiatives in strategic areas based on the common priorities set out by Campus Nantes.

These agreements also provide information on all of the funding provided by Nantes Métropole to each institution regardless of the contractual arrangements and public policies concerned. The agreements signed in 2018 with the University, Audencia and the Nantes Atlantique School of Design expired in 2020.

In 2021, three of these agreements were renewed for the 2021/2023 period. The 2021/2023 multi-year operating and investment agreements were approved at the December 2021 meeting of the Metropolitan Council for the University of Nantes.

Major facilities and programmes to support metropolitan ESR

2021 saw the continuation or launch of studies and work related to several large-scale projects. They included:

- studies related to the construction of the new Faculty of Health on the Ile de Nantes (future QHU) under the supervision of the Region, monitoring the pre-programming of this facility that will also accommodate a university restaurant and a public car park (delivery 2030);
- laying of the foundation stone for the future ENSM building, on the site of the École Centrale, for an amount of €11.5 million, with Nantes Métropole contributing €2.5 million, under the State's project management;
- digital equipment and research programmes, with funding to continue until 2022.

Research-Training-Innovation (RFI): a year of transition

RFI initiatives are designed to support major subject areas via an integrated approach. The aim is to boost the area's visibility and appeal through collective strategic thinking to provide a strong stimulus for the three priority "Research-Training-Innovation" areas. Nantes Métropole was asked to finance six of them, in line with its sectors of excellence (West Atlantic Marine Energy Centre/Energies Marines Renouvelables - WeAMEC/EMR, Alliance Europa, Bioregate, Atlanstic, ICC).

Financial agreements have been signed for these six RFI initiatives. Four of them are managed by the University of Nantes (Bioregate, Atlanstic 2020, Alliance Europa and Ouest Industries Créatives) as part of Campus Nantes; Food for Tomorrow is managed by ONIRIS and WEAMEC is managed by Centrale Nantes. The agreements covered primarily research equipment and demonstrators, as well as communication actions and international symposia.

2021 marked the end of the financial contracting of the RFIs in their original form. Consideration is being given to the continuation of support for ecosystems and the related roadmaps. The aim is to ensure the necessary coherence with the metropolitan sectors of excellence and to meet the associated innovation challenges.

Connect-talent: welcoming international researchers

"Connect Talent" is an international call for projects initiated by the Pays de la Loire Region in 2013, in partnership with higher education and research institutions and local authorities. It supports initiatives to host leading international scientists, working alone or in a team, to kick-start a new research topic or speed up progress on an existing topic.

In 2021, Nantes Métropole continued to support three projects already in progress:

- the UneSEA project (Marine/Maritime Sciences) led by Gwenaele Proutière-Maulion. The aim is to create the first international and interdisciplinary digital university dedicated to distance learning in marine sciences;
- the "Multimodality Imaging In Cardiovascular Disease" project, led by Romain Capoulade and hosted by the Institut du Thorax (Inserm UMR 1087 / CNRS UMR 6291), aims to establish a centre of excellence in multimodal translational imaging, with a focus on cardiovascular diseases;
- the MILCOM (Multimodal Imaging and Learning for Computational Medicine) project, led by Diana Mateus at the Nantes Digital Sciences Laboratory (LS2N) (UMR 6004 - Ecole Centrale de Nantes - Université de Nantes – CNRS – Institut Mines Telecom Atlantique). This project, which combines data science and health science focuses specifically on the application of machine learning to the analysis of medical images;
- the CEEV (Controlling Extreme Events) project, led by Ioannis Stefanou at the Civil and Mechanical Engineering Research Institute (GEM) (UMR 6183 - Centrale Nantes - University

of Nantes - CNRS). This project will make it possible to develop regional and national skills in digital simulation;

- the Plasti-nium project led by Johnny GASPERI, hosted at the Gustave Eiffel University, within the Water and Environment Laboratory of IFSTTAR in Nantes. The objective of this project is to study plastic pollution from the urban environment to the receiving environment, i.e. the estuary and the ocean;
- the “VESTA” project led by Claire Berton-Carabin, hosted at INRAE Centre Pays de la Loire within the Biopolymers Interactions Assemblies research unit (UR 1268 BIA). The “VESTA” project concerns the anticipation of food transitions while ensuring an optimal health quality of products.

Nantes Métropole also supported three new projects launched in 2021:

- the GENYDROGEN project, led by Mickaël HILAIRET, hosted at Centrale Nantes within the “Control” team of the Nantes Digital Sciences Laboratory (LS2N, UMR 6004 CNRS / Centrale Nantes / University of Nantes / IMTA / INRIA). Nantes Métropole provided a grant of €161,000 for the project’s development (Intelligent management of hydrogen-based decarbonated energy from fuel cell systems);
- the REGEN project, led by Sophie LELIEVRE, hosted at the Institut de Cancérologie de l’Ouest. Nantes Métropole provided a grant of €100,000 for the development of the “REGEN” project (Relationship between Genes and the Environment);
- the CANCERGEN project, led by Eric LETOUZE, hosted by INSERM at the Centre de Recherche en Cancérologie et Immunologie Nantes Angers (CRCINA) (UMR 1232 INSERM / CNRS ERL - Institut de Recherche en Santé de l’Université de Nantes. Nantes Métropole provided a grant of €120,000 for the development of the project, which is at the cutting edge of cancer genomics research.

Support for the Nantes University Foundation

The University of Nantes Foundation is working to further the transformation and influence of the University. A true strategic and development tool, it supports teacher-researcher projects that address the major challenges of tomorrow, in order to promote the transformation of the university and of our society.

Nantes Métropole is a founding member of the Foundation and supported its work with a grant of €100,000 in 2021.

Creation of Nantes University

2021 was the final stage in the collective construction of Nantes University, a new higher education and research public institution supported by the University of Nantes, Centrale Nantes, the Nantes University Hospital and Inserm, the Nantes Saint-Nazaire School of Fine Arts, the Nantes School of Architecture (ENSA Nantes) and the Jules Verne Institute of Technology.

Nantes University proposes a model of sustainable and open university that aims to build a more just and respectful society for the individual. Its articles of association were approved in December 2021 and its official creation was recorded on 1 January 2022.

I-Site NexT 2: towards confirmation

NExT (Nantes Excellence Trajectory) is one of the driving forces behind the implementation of Nantes University. After its first I-Site (Initiatives Science Innovation Territoires Économie) label in February 2017, the NexT 2 action plan was developed in 2020 (funding suspended by the State in 2019).

The NExT project of excellence is based on two major axes, health and the industry of the future, with a knock-on effect on all disciplines and a strong involvement of the human and social sciences. It aims to affirm an innovative trajectory in research, training and technology transfer, backed by ambitious policies in terms of campus life and international attractiveness.

Nantes Métropole has maintained its commitments under the 2018 NExT agreement between the University of Nantes and the National Research Agency. It therefore provided support to the University under the 2018 Campus Nantes agreement, that was amended in 2021 with specific support of €2.4 million. The project was visited by the international jury of the future investment programme (PIA) in October 2021 for the first phase of the assessment. The second phase is scheduled for January 2022.

Institute for Advanced Studies: new governance

The Nantes Institute for Advanced Studies (IEA) Foundation was created in April 2008. Nantes Métropole joined as a founding member. The Institutes of Advanced Studies are places of intellectual innovation that rely on the freedom and creativity of researchers. Coming from all countries and all disciplines, these resident researchers are therefore temporarily freed from their usual professional obligations and are free to carry out the fundamental research to which they wish to devote themselves full-time.

The particularity of IEA Nantes is that it is open to the international scene and weaves new types of relationships between foreign researchers in order to promote North/South dialogue between disciplines. In a context of globalization, the aim is to promote a real diversity of approaches in order to deal with current issues.

In 2021, the IEA was given a collegial management team that was responsible for proposing a scientific programme adapted to the end of the Covid crisis, and for stabilizing the foundation's economic model. The multi-year agreement with Nantes Métropole was renewed, with an operating grant of €450,000 in 2021.

Nantes Saint Nazaire School of Fine Arts (EBANSN)

The EBANSN Board of Directors and the Metropolitan Council in December 2021 ratified the transfer of ownership of the building complex to Nantes Métropole. Mrs. Rozenn le Merrer is now the establishment's new director.

Conferences and scientific events

The conurbation regularly hosts a number of academic conferences and symposia. In 2021, in view of the health crisis and mobility constraints, few scientific symposia went ahead as planned. However, the Cité des Congrès will host the 12 "World Rabbit Congress" organised by the Association Scientifique Française de Cuniculture (ASFC) and INRAE from 3 to 5 November 2021 and the 16th national congress of the Société Française de Microbiologie "MICROBES" 2021 organised from 22 to 24 September 2021.

ENCOURAGING CREATION, INNOVATION AND EXPERIMENTATION

By supporting the continuum of higher education - research - innovation - creation and development of companies and jobs, the objective is to position Nantes Métropole at the best national and European level by supporting its cutting-edge economic sectors (strategic and emerging sectors). It is a question of developing the territory's assets: academic excellence, economic dynamism and capacity for innovation, structuring facilities (MIN, CHU, etc.), diversity of the entrepreneurial fabric and employment.

This proactive strategy of support for innovation is intended to accompany the changes in progress, to strengthen resistance to economic shocks and to promote the balanced development of the region and its social fabric.

Valuing academic innovation: Fil Innov

This programme, led by the universities of Nantes, Angers and Le Mans, proposes to structure the supply of skills of universities in the area of innovation (based on 8 major identified fields). The objective is to bring companies closer to public research players by disseminating a culture of innovation in both the academic and business worlds.

Providing a genuine tool for interface between laboratories and businesses and the players of the value-creation ecosystem (TTOs, incubators, science parks, competitiveness clusters, etc.), the system has now been built and deployed, with the creation of a new 'sector engineer' job profile. With scientific expertise in managing innovative projects, these professionals enable optimised handling of requests for support.

Nantes Métropole funds the project as part of Campus Nantes. The system will also be available as part of the NExT programme backed by the I-Site label.

Supporting student entrepreneurship

Nantes Métropole continues to support and organise student entrepreneurship. In addition the "Les Entrep" programmes managed by the Réseau Entreprendre (which every year supports teams of students planning to set up a company), it should be noted that support continued in 2021 for several complementary training and support programmes for student entrepreneurs:

- the academic incubation scheme run by the Université de Nantes PEPITE (hubs for student innovation, transfer and entrepreneurship), supported by Nantes Métropole since 2016.
- "Odyssée", the shared incubation platform supported by the Institut Mines Télécom Atlantique and the Alliance (Audencia, Centrale Nantes and ENSA);
- Mash up, entrepreneurship awareness event for students and by students.

Supporting the creation of innovative companies

Nantes Métropole is the main funder of Atlanpole, the technology park, the incubator for innovative companies and the Business Innovation Centre of the Nantes Saint-Nazaire academic basin.

Atlanpole is accredited as an incubator by the Ministry of Higher Education, Research and Innovation and has several international labels (IASP, EBN). As the innovation hub of Nantes Métropole, it has developed expertise in innovation projects rooted in research and technology (Deep Tech).

In 2021, Atlanpole represents a network of 480 companies and 259,991 jobs. 43 new innovative projects were given a helping hand, 19 new companies were created and 122 existing companies were supported.

Supporting competitiveness clusters

In 2021, the competitiveness clusters entered the final year of their Phase IV and worked on defining a new roadmap for 2022.

In the Nantes Métropole territory, 5 competitiveness clusters are supported by Nantes Métropole, in connection with the metropolitan strategic sectors: Health (Atlanpôle Biothérapies), Manufacturing (EMC2), Maritime (Pôle Mer Bretagne Atlantique), Digital (Images et Réseaux), Food (Valorial).

In addition, business clusters and professional associations such as Neopolia or French Tech also participate in the dynamics of the sectors and receive support from Nantes Métropole.

Atlanpôle Biothérapies

In 2021, the Atlanpôle Biotherapies health competitiveness cluster continued its development with the addition of 32 new members for a total of 220 (companies, research centres, etc.).

In a context of health crisis, the cluster implemented an ambitious strategy to increase the level of excellence of its members by consolidating strategic partnerships so as to federate communities around the cluster's axes and to bring about collaborative projects.

The work focused on:

- the development of financing tools in the service of the growth of businesses, with the organisation of 24 events bringing together over 1,500 participants;
- support for the set-up, labelling and financing of 30 collaborative R&D projects, by offering its members the opportunity to participate in 6 international trade fairs;
- the drafting of recommendations in favour of SMEs within the framework of the French government's recovery plan, in collaboration with the five other French health clusters.

The cluster continues to develop in these 6 main areas: immunotherapy, radiopharmaceuticals and regenerative medicine, digital technology for innovative therapies, nutrition and microbiota, animal health.

EMC2 cluster

The EMC2 competitiveness cluster, a network of industrialists and academics, aims to be the driving force behind innovation in the field of advanced manufacturing technologies related to the aeronautical and marine industries. Its reference local area corresponds to the regions of Brittany and Pays de la Loire.

In 2021, EMC2 was strongly mobilised to support industrial actors in their innovation and transformation projects, particularly in their application to calls for projects and funds for the modernization of aeronautics.

Nantes Métropole, along with the Pays de la Loire region, supported the cluster's activities, including the promotion of the eco-responsible industry dynamic and its 5 axes: (1) a sober and ecologically respectful industry, (2) an industry that puts people at the heart of its concerns, (3) an efficient and innovative industry, (4) a collaborative and supportive industry, (5) a strategic and sovereign industry.

The EMC2 cluster also worked in 2021 on its SPIRIT 2025 roadmap; co-sponsorship on the industrial axis of the Pays de la Loire's application for the "European Digital Innovation Hub" (Artificial Intelligence specialisation) with Atlanpole; the organisation of the 8th edition of Composites Meetings, the international business convention dedicated to composite materials; the 6th edition of Plug IN, a mechanism aiming to accelerate the crossroads between industry and digital tech, driven and financed by Nantes Métropole and the Communauté d'agglomération de la Région Nazairienne et de l'Estuaire (CARENE).

Mer Bretagne Atlantique cluster

This is an international-scale cluster positioned on innovations related to the sea and the maritime sector, with the objective of fostering the development of collaborative R&D projects. These projects drive member businesses' growth by marketing new products, services or processes generated through research. The cluster's expansion into the Pays de la Loire region in 2014 boosted its impact across a broad catchment area straddling the Brittany and Pays de la Loire regions.

In 2021, the cluster strengthened its local presence through:

- a collaborative partnership with the other clusters in the area: I&R, ABT, EMC2;

- ensuring involvement in the programmes and projects that are helping to structure the maritime sector (WEAMEC, ENSM development committee, SteerCo, working group on the potential Nantes Saint-Nazaire estuary tidal turbine, etc.);
- work in partnership with Nantes Métropole, including facilitation initiatives and a strategic study of the maritime sector.

The Green Ship project (zero emission propulsion, eco-design and use of hydrogen) has been the focus of discussions on MRE.

“Images et Réseaux” cluster

I&R is a cluster with a worldwide reach, bringing together a number of players in new imaging and networking technologies in Brittany and the Pays de la Loire. Its aim is to develop research and innovation in these six technological sectors: digital trust & security; data & intelligence; networks & infrastructures; hardware & software; photonics; interactivity & immersivity, in the service of uses (agriculture, cultural and creative industries, industries and services, health, territories).

To do so, it aims to create closer links between the business and academic communities, and provide support for marketing the technologies derived from their R&D.

The health crisis propelled digital technology as an opportunity, which the I&R cluster seized, to rebuild modes of collaboration and animation.

Thus, in 2021, the highlights are the participation in the structuring of the European Digital Innovation Hub (EDIH) approach for the Pays de la Loire region (DIVA); tangible membership growth; the cluster’s commitment to the theme of responsible digital technology, with the aim of qualifying and evaluating digital innovation projects in their responsible dimension.

Valorial cluster

Created in 2005, Valorial is the agri-food competitiveness cluster of the Grand Ouest region, located in the heart of Europe’s 1st agri-food basin. It covers the three regions of Brittany, Pays de la Loire and Normandy, and brings together 365 industrialists, research centres and higher education establishments to work on smarter food.

Its core business: identify, set up and support innovative & collaborative R&D projects in the following areas of innovation: water, climate, soil, sustainable plant & animal production, operational excellence of farms & factories, full valorisation of biomass, food supply for better eating, innovative food uses & services

Valorial brings together a network and a community of more than 800 structures and 4,000 “innov’actors”. It has 365 members, 2/3 of which are industrialists, and has supported 495 Research & Innovation projects since 2006.

Neopolia business cluster

Created at the initiative of the Chamber of Commerce and Industry of Nantes and Saint-Nazaire, Néopolia is a network that included at the end of 2018: 245 companies serving the industrial development of the Pays de la Loire region, representing 130 professions, more than 300 remarkable skills and 45 markets covered. In all, they account for more than 30,000 jobs, bringing together 208 industrial companies in the region.

Neopolia plays a particularly active role in the local area through projects or its involvement in structuring bodies for sectors such as Renewable Marine Energy (RME). For nearly 15 years, it has guided and supported collaboration between companies in the conurbation by coordinating five business clusters: Aerospace, Land mobility, Offshore wind and MRE, Marine, Energy.

Nantes Métropole guides and supports Néopolia in its initiatives, which help to establish and develop SMEs, very small businesses and large companies, and in the support it provides to collaborative projects and synergies with the metropolitan ecosystem.

Experiment more

In 2017, Nantes Métropole launched an approach focusing on test-driven innovation for the territory’s economic, associative and higher education, research and innovation actors.

This ambition was reinforced in 2021. Test-driven innovation is one of the three “how-to” markers of the new mandate. The aim is to make Nantes Métropole a reference territory for experimentation at the European level.

Nantes City Lab

The purpose of the Nantes City Lab is to support project owners in need of full-scale testing facilities. Nantes Métropole guides them and provides a range of testing sites, facilities, data and engineering to test and accelerate their concept under real conditions.

This system, which is original not only in the way it operates but also in its governance, works with a system of quality certification. The steering committee is made up of representatives of the business, voluntary-sector and academic eco-system. Its role is to enrich the projects, which must meet criteria established by the members of the committee.

In 2021, the number of projects approved since the creation of the Nantes City Lab has risen to 28. The projects focus on new uses for the city and the challenges of the energy transition, such as public lighting (two projects), urban logistics (two projects), urban agriculture (two projects), access to public space for vulnerable people (three projects), housing (two projects), energy data (two projects), urban furniture and spaces (six projects) and mobility (two projects), education (one project). These initial years have confirmed that test-driven innovation is a truly successful way of doing things.

The Nantes City Lab is recognised as a place where the eco-system's players can meet and exchange ideas. As such, the Community is broadening the existing range of innovation support systems.

2021 was an opportunity to rethink the positioning of the Nantes City Lab and to strengthen the support tools for the implementation of experiments. This will be achieved by:

- developing the system as a tool for the territory, for the city's construction, by strengthening the use of in-house experimentation and with the stakeholders of the ecosystem;
- developing a territorial community of experimentation with a specific animation and with the promotion of the returns of experience;
- stimulating momentum in the territory by proposing calls for projects or other approaches, to encourage the emergence of innovative initiatives in the service of transitions.

In this spirit, adapted for the maritime sector at the end of 2019, the experimental approach has been favourably received by the players in the ecosystem, thus confirming its relevance. The first full-scale experiments of the Nantes City Lab Maritime came to fruition in 2021.

European project “mySMARTLife”

Nantes Métropole, Hamburg and Helsinki were selected under the EU Horizon 2020 programme to implement the EU project “mySMARTlife” on smart cities.

Nantes' project is designed to test innovative solutions to increase the overall energy efficiency of the metropolitan area while at the same time providing better living conditions for its citizens. Nantes Métropole, which is coordinating implementation of the local project, is being supported by the following nine local partners: Engie, Enedis, Nantes Métropole Habitat, Tan, Cerema, Nobatek, Atlanpole, Télécom Bretagne and École des Mines de Nantes (IMT Atlantique).

Initially planned for a duration of 5 years (2016-2021), like most projects of this type, the mySMARTLife consortium opted for an extension of 10 additional months, as proposed by the European Commission following the consequences of the health measures related to Covid. The project will be completed by the end of September 2022.

The mySMARTLife project is a “Smart Cities and Communities” project. It covers the sectors of energy renovation, energy efficiency and integration of production means; management and storage of energy from renewable sources in residential blocks, homes and social housing; intelligent management of street lighting; sustainable means of mobility (buses, vehicles, and electric bikes); management of urban data and the development of an energy Datalab.

In 2021, the roll-out of the last actions of the demonstrator came to an end. The main activities during the year involved:

- Finalising the implementation of energy and mobility actions (building renovation, photovoltaic power plants, electric vehicle charging stations, etc.);
- set-up of the follow-up and the collection of measurement data that will serve as a basis for the assessment of the project actions within the Urban Data Platform;
- ensuring the project's communication: webinars, podcasts, event participations;
- providing the reporting to the European Commission.

It should be noted that, in connection with the release of the new European programme, in particular the 2021-2027 “Horizon Europe” framework programme for research and innovation, Nantes Métropole is preparing to apply for the “100 climate-neutral cities” call for expressions of interest (AMI) with its mySMARTLife project.

SUPPORT THE TERRITORY'S STRATEGIC AND EMERGING SECTORS

Nantes Métropole aims to feature at the forefront of innovation technology in Europe. Nantes Métropole is thus working to consolidate and develop economic and industrial activities, in connection with the promotion of research, support for innovation structures, support for sectors of excellence (health, food, manufacturing, maritime, digital, creative and cultural industries), technological niches and emerging sectors.

Health of the future

Station S

In 2021, Nantes Métropole finalized the launch of the "Station S" project, that aims to federate the sector's actors around the health of the future, and to optimise health-related innovation, research and development capacities within the Nantes Métropole territory. A dedicated project manager was recruited.

Through co-construction workshops with industry stakeholders and meetings (entrepreneurs, researchers, support structures, etc.), the project's ambition and its scope were successfully defined in 2021. The aim is to position Nantes as a national and European centre of excellence in health, and to create the ideal environment and optimal conditions for the development of research and innovation in this field.

The "Station S" project is part of the overall dynamic of the creation of the Health district (hospital-university), around the new university hospital, the faculty (health sector) and the health research institutes, that will progressively take place on the Ile de Nantes.

This prefigures the use of the totem building that is planned for mid-2024. Station S will provide an ideal environment for start-ups and companies to accelerate their innovation and R&D projects for the health of the future. These spaces will cover 3,000 m² by 2024 and 30,000 m² by 2030.

The project is fully in line with the national Health Innovation 2030 plan, announced in June 2021, which focuses on biotherapies and digital health, and encourages the creation of world-class sites that promote the linkage of the skills needed for Health innovation.

An open governance has been in place since July 2021. It includes representatives from Nantes Métropole, Nantes University, Nantes University Hospital, the Atlanpole Biotherapies competitiveness cluster, the Atlanpole incubator and the Nantes Saint-Nazaire Chamber of Commerce and Industry.

Health Innovation Fund

In April 2020, Nantes Métropole created the €1 million Health Innovation Fund to provide seed support for local Covid research projects. It enabled 9 innovative projects in Nantes to make significant progress, with direct economic benefits (fundraising, European financing, national recovery plan, etc.) amounting to over €50 million for the region.

In this context, the Metropolitan Council meeting on 29 June 2021 approved a fund of €800,000 in operation in 2021, which fed 11 additional innovative projects in favour of the health of the future and 4P medicine (predictive, preventive, personalized and participatory).

The selected projects were developed by local innovative companies and academic actors: Affilogic, Biomadvanced, CHU de Nantes, Directosanté, Felix Santé, Help Story, Institut de Cancérologie de l'Ouest Lyv Healthcare, Odroa, Orthopus, Welo.

Events and happenings

Nantes Métropole was a partner and funder of the 1st edition of the Hacking Health Nantes Health Innovation Marathon which took place from 9 to 11 April, 2021 in a 100% online format due to the Covid crisis. For 48 hours, more than 100 people (healthcare workers, developers, engineers, designers, lawyers, psychologists, communication specialists and innovators) worked together to identify and imagine a solution that would respond to six problems experienced by healthcare professionals or patients.

Food: MiN, Agropolia, incubator and events

Support for the structuring of a metropolitan Foodtech community, in collaboration with the Region, continued in 2021 through several actions.

The renewal of the public service delegation for the operation of MiN Nantes Métropole has been finalized and awarded to SEMMINN (to be approved by the Metropolitan Council in December 2021).

The development of the Nantes Agropolia agri-food cluster continued. This 55-hectare area, of which 20 hectares are dedicated to MiN Nantes Métropole, reached a 75% marketing rate (excluding MiN) in four years, while creating more than 2,300 jobs (including MiN). 6 business projects are in the installation phase (2.7 ha of land).

“Food Logistics Workshops”, in connection with the urban logistics pact of Nantes Métropole, were also initiated in 2021.

Work began on coordinating the work of Nantes Métropole, MiN, and the actors at La Géraudière (Technocampus Alimentation, ONIRIS, Valorial, INRAE, Vegepolys Valley, Atlanpole, LIGERIAA. It provided a time of exchange and sharing in order to set up, in a concerted way, innovative actions in favour of sustainable food. It is within this framework that the project to create an incubator for start-ups in the agri-food industry was developed.

In view of the event scheduled to take place in Nantes in 2022, the event component focused on the preparation of the European NutrEvent convention, dedicated to innovation in food, nutrition, human and animal health. The event is organised by Eurasanté, Valorial and Atlanpole Biothérapies in partnership with the regions of Hauts de France, Brittany and Pays de La Loire, Lille Métropole, Rennes Métropole and Nantes Métropole.

In addition, the monitoring of the action plan of the Metropolitan Territorial Food Project (PAT) was initiated, as well as the preparation of the Territorial Conferences of the Agroecological Transition and Sustainable Food 2022.

Manufacturing: IRT, Jules Verne Industrial Innovation Cluster, Nautilus

Created in 2012 on the initiative of the EMC2 competitiveness cluster, with the support of the State (future investment programme), local authorities, industrialists and academic actors in the region, the Jules Verne IRT saw its development resume in 2021 (in terms of project volume), following a savings plan in 2020 (impact of the health crisis).

In association with Nantes University, this resulted in the September launch of work on Nautilus, located on the Jules Verne Industrial Innovation Pole (PIIJV). This new 6,500 m² building, for mixed industrial and tertiary uses, will house the headquarters and various collaborative R&D activities of the IRT Jules Verne. The building is scheduled for delivery in the summer of 2022. Nantes Métropole approved support of €1 million for the project during the Metropolitan Council meeting (October 2021).

In addition, the Community renewed, for a period of 3 years, its support for the PERFORM (Programme de Recherche Fondamentale et de Ressourcement sur le Manufacturing) thesis cluster programme of the IRT.

In 2021, at the Jules Verne industrial innovation cluster, work began on the new CEATech building and the future Daher innovation centre [Shap'In] (dedicated to thermoplastic composite aerostructures), which aims to accommodate 15,000 industrial jobs, 1,500 research jobs and 3,000 students by 2030. The Odyssée Jules Verne association, which brings together the site's industrial actors, was created.

During this year, Nantes Métropole supported the actions of the EMC2 competitiveness cluster.

Maritime: sailing, naval and marine renewable energy

2021 saw progress on the sailing action plan, validated in 2019 around 4 structural priorities and 20 actions. The first achievements involved the electric factory project, future showcase site for the maritime / sailing sector, with delivery of the 1st lot taking place in July 2021.

The “Sailing Lab”, an offshoot of the Nantes City Lab, launched at the end of 2019, helped develop the experimentation approach applied to “sailing” projects and to federate the community throughout 2021.

A land strategy study provided short, medium and long term visibility on the real estate and land availabilities of the sector, in order to optimise the exogenous implantations and the development of endogenous companies.

Nantes Métropole confirmed its support for the new regional cluster NautiHub (co-financed by the CARENE and Sables d'Olonne Agglomération), whose leadership is delegated to the CCI.

On the Naval side, a real sector is emerging on the French west coast and in the Nantes Saint-Nazaire area. This includes start-ups, major naval industries, the large maritime port (committed to an energy transition strategy), construction sites, design offices, naval architects and makers. Academic players (Centrale Nantes, ENSM, ENSA, UN, etc.) and a high-performance and atypical innovation ecosystem are also at work. In this context, major shipowners are fully committed to the decarbonisation of maritime transport (MAERSK, Louis Dreyfus Armateur, etc.).

Whereas the skills are present and recognised, synergies are being organised around the European association Windship and the competitiveness clusters. The first achievements initiated in 2019 are continuing: Neoline contracts with Manitou and Bénétiau, Ariane 6 contract signed with Zephyr and Borée.

With regard to Renewable Maritime Energies (MRE), the study on the potential Loire estuary tidal turbine, carried out with CARENE, Atlantic Sea cluster, the Loire Estuary Public Interest Group (GIP) and the major port of Nantes Saint-Nazaire, as well as the Brittany Atlantic Sea and EMC2 competitiveness clusters, was completed in 2021. Moreover, Nantes Métropole co-financed the Seanergy webinar on the bridges to be created between the aeronautics and MRE sectors.

Digital: French Tech Nantes, Hall 6, events

The Nantes metropolitan area aims to become a reference centre in digital technology in Europe by bringing together all of the territory's relevant players and supporting the French Tech Nantes, which brings together innovative companies and start-ups.

French Tech Nantes implemented its roadmap in 2021 around 4 priorities: the growth of start-ups, "deeptech" via Atlanpole, skills and diversity / gender equality, Tech for Good (positive impact technology).

It also continued the local roll-out of national initiatives such as French Tech Central (connection between start-ups and public administrations) or French Tech Tremplin (creation of start-ups for entrepreneurs with a diversity background). Nantes Métropole is strengthening its support for the actions of the associations La Cantine Numérique (Animation of the digital ecosystem and start-ups, French Tech Nantes dynamics, Tech with a positive impact) and ADN Ouest (Responsible Digital, Jobs and skills, Digital transition of VSEs/SMEs).

2021 was marked by growth of the number of jobs in the digital sector with 28,800 jobs in Nantes Métropole (+700 in one year despite the crisis) and 2,700 companies, investments supported in digital start-ups (€195 million in 2021 for all start-ups in all sectors) and 2 Nantes-based start-ups that attracted attention (Akeneo and iAdvize in the national ranking of the 120 "remarkable" French Tech start-ups).

Also of note was the 2021 complete opening of the flagship building of the digital ecosystem: Les Halles 6, with in particular the inauguration of its eastern part, which hosts digital and creative companies, as well as La Cantine numérique. Actions to promote retraining and the diversity of skills in the digital sector were carried out (Safari des Métiers, ATDEC's @mbition numérique course, etc.).

In addition, Nantes Métropole launched a project dedicated to digital skills as part of the sustainable economic recovery, while a dynamic events programme took shape in 2021 around major events: Nantes Digital Week, DevFest and Digital Change.

Cultural and creative industries (CCI): Samoa, Halls 1 and 2, international cooperation

Nantes Métropole's ambition is to develop a European centre of excellence in CCI, located in the Creative district of the Ile de Nantes. Located on a 15-hectare site that once housed the operations of the shipbuilding industry, this area is a unique focal point for creative talent, with a mix of companies, cultural, training and research establishments, collectives and start-ups.

2021 was marked by the renewal of the 2020/2024 public service delegation (PSD) with the SAMOA for:

- the development, coordination and promotion of cultural and creative industries in the metropolitan area;
- the operation, management and coordination of Halles 1 and 2, the iconic CCI building in the creative district, a new unifying citizen meeting place (shared and collaborative work space) dedicated to creativity and innovation.

In addition to the health situation imposing the lockdown and thus a pause of the works, the buildings of halls 1/2 suffered damage due to last winter's bad weather, leading to a stop of the building site. This required the previously completed works to be removed and redone (resulting shift of delivery to mid-2023 instead of late 2020).

A FICOL (Facilité de Financement des Initiatives des Collectivités Françaises) financing agreement between Nantes Métropole and the Agence Française de Développement was signed with the city of Recife (Brazil). The project involves accompaniment by SAMOA of the Brazilian city by the pooling of good practices in the fields of urban innovation, creative economy, new urban core areas, Smart City and sustainable and inclusive development. For legal reasons, Nantes Métropole is the official beneficiary of the €630,000, with an agreement to transfer €600,000 to SAMOA.

The collaborative project between Montreal and SAMOA continued as part of the call for projects of the Fonds Franco-Québécois pour la Coopération Décentralisée (FFQCD). The objective is to continue to develop cooperation between the Pôle économique ICC of SAMOA and the Partenariat du Quartier des spectacles in Montreal in order to deploy joint actions. Within this framework, the aim was to organise the implementation, coordination and evaluation of a creative installation in the public space with the aim of raising public awareness of climate change issues. For legal reasons, Nantes Métropole is the official beneficiary of the €15,000, with an agreement to transfer to SAMOA.

A designers' club was initiated by SAMOA: the current PSD provides for the structuring and animation of the design sector. SAMOA supports the development of design actors. Following the appraisal of the business sector, SAMOA organised the 1st club meeting in December 2021, with the objective of drafting the roadmap for 2022.

Finally, in 2021, SAMOA's 2022-2026 Medium Term Plan was prepared. It gives visibility to the strategy of the metropolitan development company, both in its role as a developer and in its support for the ICC industry. In this aspect, SAMOA is taking up the main lines defined by the DSP.

Green / Decarbonated Hydrogen: an emerging industry

In 2021, numerous exchanges took place between elected officials involved in innovation and ecological transition and all of the technical departments concerned by the development of green hydrogen uses.

Nantes Métropole intends to maintain its support for research and development projects by academic actors and innovative projects by private actors in the region concerning the green hydrogen sector. The aim is to improve performance throughout the value chain: production, storage, distribution and uses.

As part of public service missions (transportation, energy, housing, etc.), it is important to learn how to master the complete green hydrogen ecosystem, in order to deploy this technology when the hydrogen is of renewable origin.

In this context, Nantes Métropole signed an agreement to support the hydrogen research projects of the Lycée de La Joliverie over the period 2021-2023. The establishment holds the world record for the distance covered by a hydrogen-powered land vehicle (CityJoule prototype). In 2021, Nantes Métropole also continued its support to the national association France Hydrogène, while actively participating in the meetings of its regional branch.

Finally, several economic actors announced very ambitious projects in the region in favour of the hydrogen industry, such as Airbus, MAN Energy Solution, the Nantes Saint-Nazaire seaport, Cetim, CEA Tech and the start-up Lhyfe, which raised €50 million of funding.

THE TRANSITION ECONOMY

At the beginning of this mandate, Nantes Métropole intends to mobilise public policy on the responsible economy and employment to accelerate the transition of companies towards a more sober and inclusive development model in order to contribute to the markers of ecological transition and social justice.

The objective of this mandate is for Nantes Métropole to become a leading territory in responsible economic development. With this in mind, Nantes Métropole has renewed its action and its internal organisation. The construction of this public policy was discussed with each municipality in the context of developing future regional contracts. It was also based on several consultation processes conducted in 2021.

In the current situation, corporate social responsibility (CSR) appears, more than ever, as an appropriate response to the consequences of the health crisis and will be a lever for recovery and sustainable growth for companies in the future. Similarly, in order to deal with the social and environmental emergency, companies must pivot their model towards a more responsible economic development. Nantes Métropole intends to support and enable them as they accelerate in this direction.

Bringing to light and spreading solutions to encourage and support companies towards a responsible economic development (RED), less resource consuming and more inclusive

Supporting entrepreneurship

Nantes Métropole supports stakeholders engaged in providing start-up guidance and support (BGE, L'Ouvre-Boîtes 44, Bâticréateurs, CoopChezVous, Oz, Coopérative d'Installation en Agriculture Paysanne, Union Régionale des Sociétés Coopératives et Participatives) and funding projects (ADIE, Initiative Nantes, Fondes). It also provides a range of local services covering the full range of entrepreneurial ventures.

To support entrepreneurship, Nantes Métropole is also taking action in the following areas:

- coordination of the Sup'Porteurs de la Création 44 network, which brings together stakeholders providing support to start-ups and aims to improve the visibility and transparency of the services on offer to project owners;
- roll-out of the new 3-year "Osez entreprendre" agreement (2021-2023) by strengthening project detection and, in particular, "outreach" and activity tests to facilitate and secure the business project; in 2021, over 200 people received support in the areas of detection, creation or activity tests;
- support for budding entrepreneurs increasingly on the lookout for meaning and purpose to drive their ambitions; in response to this, they were invited to incorporate CSR best practices into their business right from the creation starting blocks; a CSR module specifically designed to raise awareness has already been developed along with members of the Sup'Porteurs de la Création 44 network.

The CSR platform of the Nantes metropolitan area

The CSR platform of the Nantes metropolitan area coordinates the various actors involved in the economic development of the local area to engage SMEs and VSEs in coherent CSR approaches, which will enable them to improve their social, environmental, economic and territorial impact. It is based on transparent and participatory governance, a resource site, working groups, a strategy of ambassadors and an annual "Social Change" event.

In 2021, a consultation process with over 200 stakeholders was conducted in order to redefine the specific role of the CSR platform and its priorities for the coming years.

Its new rationale: "Federating the stakeholders who are committed to upholding CSR across our region in order to develop and establish solutions designed to encourage and support micro-companies and SMEs in shifting over to responsible economic development".

Its 3 pillars:

- experiment and incubate;
- raise awareness / make visible / spread;
- observe and assess.

The consultation made it possible to define the issues on which it is essential to act first. Nantes Métropole therefore decided to appropriate these priorities and place them at the heart of its public policy by proposing ready-to-use solutions for the following 10 issues:

- contributing to the sustainable management of resources by supporting the circular economy most;
- reducing and offsetting carbon footprint;
- facilitating the local economy, notably by working with local suppliers in procurement;
- preserving biodiversity;
- tackling poverty and maintaining skill-sets (sustainable employment);
- upholding gender equality;
- supporting employee mobility (over and above company directors);
- opting for transparency in CSR processes and impact;
- encouraging companies to employ young people, older people, and people excluded from the labour market;
- developing responsible procurement.

The CSR platform leads a strategy of #RSEnantes ambassadors throughout the territory composed essentially of heads of networks (clubs and business networks, association and SSE networks, employee unions, institutions, academics and experts, funders) in constant growth. More than 79 network heads are already present.

The aim is to continue its roll-out (support for club capacity ramp-up) and to lead this network of ambassadors in order to support the business model change and to spread solutions and best practices throughout the territory (federations, territorial clubs, thematic networks, etc.).

CSR platform key figures 2021:

- +3,000 connections / month on the website (<https://rse.metropole.nantes.fr/>);
- 164 corporate best practices and “CSR Minutes”;
- 255 “Parcou’RSE” service offers identified within the territory;
- 79 CSR ambassadors (members of the platform) split into six panels; 5 additional committed networks joined the governance of the CSR platform (Ruptur, R2ODD, Produire en Bretagne, Label Lucie, ADN Ouest);
- 13 active working groups have been held since the launch of the platform, including 3 in 2021, resulting in “open source” solutions for companies in terms of CSR;
- 2 new thematic files prepared in order to enlighten the territory’s actors in a concrete way: telecommuting and triple accounting;
- focus on IMPACT Negotiation training: a concrete support system stemming from the working group on professional gender equality launched in 2017; more than 3,000 women trained since the launch of the module; 64% of the women have negotiated their salaries;
- close-up on the company onboarding system or how a company can, in a supportive way, promote employment even in these difficult times; in 2021, more than 65 companies applied for their “welcoming company” certificates (via sponsorship, work placements, coaching, visits, etc.).

A strategy of pooling/merger of the RSE and NEDMP (Nantes Entreprises Dans Ma Poche) sites was initiated for the beginning of the 2021 school year. It should be completed by the end of 2022. The aim is to offer a single digital tool for companies, relevant to the public policy of responsible economic development. The transfer of content from the CSR site will be encouraged and a better coherence will be displayed on the part of the Parcou’RSE service offer towards a responsible company offer.

Supporting the territory’s economic changes

Nantes Métropole is positioned as a unifier and facilitator of metropolitan stakeholders and supports them in moving the territory collectively towards a more sober economic model (territorial industrial ecology, circular economy, low-carbon...), thus contributing to the sustainable management of resources and the local economy.

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A new positioning of the territorial SSE roadmap by 2026 to meet the challenges of energy, social, societal and environmental transitions

The previous 2015-2020 roadmap was co-developed with the Les Ecosolies network and catapulted the region to the position of pioneer, recognised across France for its success in developing the social and solidarity economy (SSE).

The goal will now be to position SSE as an effective philosophy in enacting the impactful energy, social and environmental changes to be ushered in by the greater metropolitan area. The aim is to promote the transition of the development model, notably through the cooperation of the territory's stakeholders, by hybridizing the prioritized sectors of activity and the nature of the organisations.

The social and solidarity economy (SSE) is a driver for regional cohesion, social innovation and economic vibrancy. It accounts for nearly 37,000 jobs across the conurbation (16% of private-sector employment). The roadmap dedicated to SSE by 2020 made it possible to position it as an economy that provides meaning as well as innovative and concrete solutions in response to the needs of residents.

In 2021, the **SSE roadmap 2021-2026, was co-constructed.**

Its drafting follows a mobilisation of more than 300 stakeholders of the territory: elected officials, SSE and non-SSE companies, institutional stakeholders or from research and innovation...

This roadmap addresses 8 action levers:

- evaluate and measure wealth creation differently (impact indicators);
- invent new financing models, strengthen the support of stakeholders;
- trace out the real estate strategy for the deployment of SSE projects within the territory, with the Solilab of tomorrow as an emblematic project;
- ensure territorial networking and cooperation;
- communicate and make the actions visible to the general public and companies;
- ensure that public and private ordering is a powerful lever for developing a local and responsible economy;
- contribute to strengthening job creation, professionalization and inclusion.

These 8 levers are used to develop 10 areas of cooperation:

- solidarity-based ecoconstruction, reuse and bio-resources, inclusive housing, food supply and short circuits, sustainable urban logistics, responsible digital technology, inclusive mobility, citizen energy, health for all, culture and citizenship.

It should be noted that the **"ESS Nantes Factory"** initiative to support the start-up of entrepreneurial projects (piloted by Nantes Métropole with France Active Pays de la Loire, the Ecosolies, the Crédit Municipal de Nantes, ADEME and the Caisse d'Épargne Bretagne Pays de la Loire) benefited **7 projects in 2021.**

The new SSE agreement 2022-2024 Nantes Factory, integrating the new priority sectors of the roadmap, will be rewritten. It will reflect the ambitions of the partners involved in supporting the emergence of SSE entrepreneurial projects.

Finally, the essential missions of **Ecosolies** were continued and developed:

- support projects in their initiation phase, but also ease project owners' and entrepreneurs' access to other sources of financing in the project start-up and development phases;
- facilitate guidance and support for project owners and entrepreneurs;
- pay particular attention to projects' progress after their start-up phase.

The Solilab cooperation and social innovation cluster is a key venue for SSE within the territory.

Constructed on a surface area of 9,000 m² and comprising 4,000 m² of buildings on Rue de Saint Domingue on the Île de Nantes, it has been operational since February 2014. Managed by the SCIC "Les Lieux Communs" and Les Ecosolies association, this Local Area Business Cooperation Hub aims to give SSE a more visible presence, through:

- a multi-business service offering to develop social entrepreneurship, the creation and consolidation of social enterprises, and support to develop the skills of SSE organisations in Nantes Métropole;

- a place where budding entrepreneurs can take initiatives, test their ideas and innovate. It offers an array of tools for the promotion, consolidation and economic development of projects in SSE, including a business incubator, affordably-priced premises and shared services for start-ups, co-working spaces, an event venue, a reuse/recycle shop and a solidarity-driven canteen.

Flagship actions led by the Ecosolies:

- contribution to the joint drafting of the SSE roadmap;
- continuation and development of support activities for the emergence of entrepreneurial SSE projects;
- development of a new offer in favour of the development and the change of scale of SSE companies (the “accelerator”);
- support for projects within the framework of the Initiative Factory: “Inclusive Mobility”, “Shared Kitchens”, “Inclusive Housing”;
- extension of the training offers around the reuse professions, signing of the partnership with the CNAM within the framework of a Programme d’Investissement d’Avenir (PIA) to qualify the trainings and to experiment new courses from 2021;
- prospective work with the SCIC “les lieux communs” to define the Solilab of tomorrow: roll-out in a multi-site logic to accommodate the diversity of SSE activities.

Some highlights and figures concerning the activity of Solilab and Ecosolies at the end of 2021

- 252 member structures of the Ecosolies, bringing together more than 3,000 companies;
- 163 structures renting permanent workspace at the Solilab;
- Pop Corn (pre-incubation initiative to go from idea to project): 51 business ideas tested, with 61 participants; 16 group workshops with L’Ouvre-Boîte 44; 29 publicly presented projects;
- incubator: Support for the creation of SSE companies for 7 projects in 2021 and selection of 6 new projects for the 2022 class;
- business events: for the 2nd consecutive year, cancellation of the Braderie des Ecosolies; continuation of the Folie des Plantes with a 13% turnover increase and 38,500 visitors;
- the Other Market: 66 exhibitors, €412,000 of turnover; 120 jobs consolidated in the exhibiting structures thanks to the event and a new offer for a professional public: the gift boxes of the Other Market (184 boxes sold for a total turnover of €10,000);
- Summer at Solilab: opening to cultural actors (3 events / artists’ residences) and members of Ecosolies (catering, animations) during one summer.

2021, Nantes’ circular economy sectors are stepping up their structuring despite the health crisis

In the domain of the circular economy, Nantes Métropole aspires to become a trail-blazing region by helping to kickstart circular business plans, anchor their economic models, work to overcome stumbling blocks, and contribute to a vibrant, active network of stakeholders.

Four years after the adoption of the Nantes Métropole circular economy roadmap, **the structuring of circular industries is increasing**, with:

- contribution to the drafting of the metropolitan strategy **Zero Plastic Pollution**, in particular on the axis “reduction of plastics at the source”, in collaboration with the association WWF France (appraisal, characterization of alternatives to plastic, support for changing practices, accompaniment of projects, etc.);
- **consultation** with the stakeholders in the Nantes digital ecosystem, finalizing of the specifications for the 3R (Reduce, Reuse, Recycle) digital equipment project and the launch of the related public contract;

To accelerate this dynamic in favour of transitions, Nantes Métropole mobilised, by supporting to varying degrees, **projects considered to be structuring** in terms of the circular economy. This notably involves:

- the Boites Nomades project, that offers a solution for sustainable returnable containers to reduce waste, especially single-use plastic, and preserve resources;
- the Berny project, that concerns the experimentation of reusable stainless steel containers in mass distribution (experimentation Super U of La Chapelle-sur-Erdre);

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- the project of the company Dyvem specialised in the tracing and management of industrial production waste in a circular economy logic;
- the continuation of exchanges around the Lilokawa project (manufacture of products from flexible plastic waste / event tarpaulins) supported by the Comité 21 and to which the services of Nantes Métropole have contributed their technical expertise;
- the BAmE (Bon à Manger) project, a solidarity-based and sustainable project to move away from “all disposable” catering in companies;
- the Solution Recyclage project, a recycling channel for single-use polypropylene work clothes.

The metropolitan approach in favour of the circular economy is also part of a privileged relationship with **company networks**, in particular with the association of Responsible Managers of the West (DRO) and the association RUPTUR:

- DRO, contributions to the work of the Zero Plastic Workshop;
- RUPTUR, participation in actions to promote the disruptive economy, changing practices, experimentation, advice, networking.

With regard to the circular economy of the **BTP loop**, we note the commissioning of the Ecopôle de Cheviré, which offers a local solution for construction and industrial waste. This project, financed by the Suez group, responds locally to two main issues:

- reduction of the volume of construction waste by developing treatment and recovery tools;
- limiting the consumption of raw materials, with the use of recycled materials and the reuse of construction site rubble as alternative materials.

Finally, in 2021, Nantes Métropole responded favourably to the call for expressions of interest relayed by Eurocities for **participation in the DREC project** (“Dramatically Reducing Embodied Carbon in Europe”).

Based on the initiatives, needs and expectations of the partner territories (Lille, Bordeaux and Nantes at this stage), the project aims to:

- Promote the adoption of ambitious carbon footprint and bio-based materials policies in 10-20 European cities within 3 years;
- build a strong coalition to advocate for ambitious European policies for the reduction of the carbon footprint and the use of bio-based materials at EU level.

A 1st step was taken in this European cooperation with the delivery at the end of 2021 of the technical report from Bionova, which identifies 9 possible avenues of local level reflections, including:

- systematically requiring environmental and health data sheets (EDS) for materials when launching a construction programme;
- implementing a lifecycle analysis method for materials;
- integrating carbon reduction indicators into the annual sustainability report;
- using a software program or a process to arbitrate the demolition vs. innovation choice;
- strengthening the requirements for the use of bio-based materials;
- ensuring the territorial network of treatment platforms for building site materials;
- allocating a constructability bonus for eco-circular programmes...

Supporting companies in the fields of ecological transition

Within the framework of the Energy Master Plan and its ambitious objective of reducing consumption by 30% by 2050 for tertiary and industrial activities (which currently account for 31% of consumption), the aim is to contribute to the transformation of the region by supporting companies in their transition to a more environmentally friendly way of doing business, particularly in the fields of energy, greenhouse gases, waste, travel and adaptation to climate change.

100% useful roofs

Following the launch in 2020 of an action directly resulting from the “energy transition” roadmap, 15 companies received support in 2021 to carry out feasibility studies for agricultural rooftop installations, photovoltaic solar panels or vegetation.

The total surface area of deployable solar collectors is nearly 34,000 m². The total surface area of targeted vegetation is 8,800 m², with great disparity between sites.

Energy renovation of the tertiary sector, 2 chapters initiated in 2021:

- the low-carbon tertiary school, run by Novabuild in partnership with Nantes Métropole, for buildings and sites of over 1,000 m², enabling owners, managers or simply occupants to comply with the regulations known as the “tertiary decree”;
- for surfaces of less than 1,000 m², the SARE (*Service d’accompagnement à la rénovation énergétique*) was launched to assist owners, managers or occupants with renovation work on their property.

The process in progress since 2019 for and with business collectives continued in 2021:

- in the Nantes city centre, an assessment and reflection process led to the conclusion of a new partnership agreement for the 2022-2024 period;
- in the Vertonne business park (Vertou), the collection of professional waste was decided upon as part of the action plan formalized with the companies;
- in the Bas Chantenay sector, the first business meetings were held, which should lead to collective work in 2022;
- the start of collective discussions by business sector following the mobilisation of the Café-Hotels-Restaurants professional organisations and the initial work carried out with AURAN within the framework of the “Industry and Energy” priority project.

The flagship events

Go Entrepreneurs

The 14th edition of the “Go Entrepreneurs” trade show was held on 25 November 2021 in a mixed format (face-to-face/remote).

5,500 entrepreneurs attended despite an uncertain health context (51% women). Nantes Métropole and the CARENE led 1 conference and 2 workshops:

- conference: “Entrepreneurs, contribute to the world of tomorrow: create a responsible and profitable business!” (95 on-site and 152 remote);
- workshops: “Business incubators or/and co-working: which solution to accommodate my company?” (13 on-site and 78 remote) and “Business and employment cooperatives: undertaking differently with the status of salaried entrepreneur” (23 on-site and 61 remote).

As in other years, the top 5 areas of interest of the visitors were the following, in order: communication, prospecting, network / financing, subsidies, business plan / support, advice, market research / women entrepreneurship / referencing, website, social networks.

Social change “CSR - My company is committed and takes action”

On 14 December, the 4th edition of Social Change took place.

This event dedicated to CSR and responsible economic development is co-organised by Nantes Métropole, the RSEntes platform (80 networks), the Lettre API and Ouest France.

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In only 4 years, Social Change has become the meeting place for professionals in search of meaning, to get inspired, to learn, to make their model evolve and to act in favour of a sustainable economic development.

Each year, Social Change is an opportunity to produce new content by highlighting the platform's local players and ambassadors, to discover the best practices implemented and to find inspiration for changing the model or accelerating the transformation of one's company. All of the content is then published on the dedicated website.

A few examples:

- a testimonial: "Using CSR as a performance lever";
- a round table discussion: "How is the new generation inspiring companies to reinvent themselves?" »;
- a textbook case: "Thanks to CSR, let's find a collective meaning";
- an awareness module: "CSR from the start: responsible and profitable! »;
- a tutorial: "Use renewable energy for your business".

More than 1,200 visitors attended: employees, company managers, and people interested in CSR issues were able to discuss the themes of quality of life at work, local involvement, the environment, etc. (64% employees, 15% managers, 5% students, 16% others). Of special note during this forum:

- 20 presentations (available in replay);
- 1 village with 11 hubs and more than 100 solution providers;
- 170 companies and candidates present at the CSR job dating and Culture Speed Meeting.

2021 social innovation prize

The Innovation Award 2021 was organised on the theme of "responsible digital".

The winner was the association "Le Coup de Main Numérique", associated with the start-up MOBIDYS.

The project involves fighting illiteracy and electronic illiteracy by combining, on the one hand, the expertise of MOBIDYS that develops digital tools to facilitate access to books and reading for dyslexic people, and on the other hand, the know-how of the association "Le Coup de Main Numérique" which fights against electronic illiteracy by working with the public in priority neighbourhoods.

FOR THE RESPONSIBLE ECONOMY AND EMPLOYMENT

EMPLOYMENT AND INTEGRATION THROUGH ECONOMIC ACTIVITY

Employment is a major concern for inhabitants and a key factor for social cohesion. As such, it constitutes a political priority for this term of office.

For several years, salaried employment has been growing in the conurbation. With one of the lowest employment rates of any large city in France (6.4%), Nantes Métropole is pursuing its action for employment as part of a public policy for responsible economics and employment. The challenge is to enable all of the territory's inhabitants to benefit from the economic dynamics of Nantes Métropole, with particular attention paid to those who are furthest from the labour market. It is also a question of helping to match job supply and demand, by working closely with companies. In this context, new actions will be undertaken in 2022 to strengthen the relationship with the territory's employers and to anticipate the needs in terms of skills, linked to the economic changes needed in support of the energy and ecological transition of the territory.

Nantes Métropole focuses its support on the general interest activity of employment-oriented organisations: the Local Area Association for Development of Employment and Skills (ATDEC - which combines the activities of the Maison de l'Emploi, the Local Plan for Integration through the Economy - PLIE - and the Mission Locale) and the École de la Deuxième Chance (E2C). The aim is to promote the regionalization of the community's employment and integration policy through an integrated service offer.

Services to young people in the Metropolitan area through the activities of the Mission Locale

The Mission Locale offers personalised support for young people under the age of 26. It helps them in searching for a job, but also in finding solutions to everyday hurdles such as accommodation, mobility, health, etc. Mindful of the need for a locally-accessible service, it has ten sites open to the public in Nantes and 18 information points outside Nantes.

Highlights in 2021 included:

- 9,770 young people supported in their career path, including 4,019 at first-line reception centres;
- 1,033 young people started a training course; 111 young people accompanied in connection with the training obligation;
- 3,477 young people given job placements, including 509 in work-study programmes and 505 in corporate immersion programmes for 674 company work placements;
- the ongoing Garantie Jeunes scheme helped 707 young people in the Metropolitan area who have joined a dynamic and intensive 12-month course to prepare for the job market. 22% of these young people were from the City's priority neighbourhoods. 52% of them benefited from work experience and/or training or a period of immersion in a company;
- a particular focus on young people living in the City's priority neighbourhoods through targeted actions:

- support for young women in single-parent households: 140 young women accompanied (37% of whom live in the City's priority neighbourhoods): 21% found a job and 14% are in training;

- specific support for young people on work-study programmes from the City's priority neighbourhoods: 94 young people in reinforced support and 70% of positive exits;

- integration through employment (IAE): 324 young people accompanied by the Mission Locale benefited from an IAE programme (19% in the City's priority neighbourhoods, 42% without stable accommodation, 35% aged 18-20, 66% without any diploma, 72% without a driving licence, etc.);

- 109 entries in assisted contracts: 82 "Parcours Emploi Compétences" and 27 "Contrat Initiative Emploi" (+29 other contracts still in progress, signed in 2020): 20% from the City's priority neighbourhoods, 39% without any diploma.

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The Fonds d'Aide aux Jeunes

The Fonds d'Aide aux Jeunes, or youth support fund, provides individual financial assistance for urgent needs or one-off projects contributing to the social and professional integration of youths in great social hardship, aged between 16 and 24.

It caters for people who cannot call on their family for support with building their future, either because they have no contact with or are in conflict with their family, or because of their family's financial precarity prevents from providing material support for achieving self-sufficiency.

In 2021, 1,045 young people from the Metropolitan area received support to the total value of €345,558.51, corresponding to 1,702 aid requests. This aid is mostly to cover basic living costs (81.6%), training (7.8%) or housing (8.1%). 44% of the young beneficiaries are women, 82% are under the age of 23 and 41% have a level of education lower than the CAP or BEP (secondary-school vocational training certificate/diploma).

Services for young people through the activities of the Loire Estuary École de la Deuxième Chance, now the Nantes-Saint-Nazaire E2C

In 2021, 182 young people followed a training programme at the E2C Nantes site: 42 were present on 1 January and 140 joined the mechanism throughout the year. The rate of trainees living in one of the City's priority neighbourhoods is 34%. The most represented neighbourhoods are: Bellevue (32%), Dervallières (10%), Breil (10%). The average age is 20.

The rate of positive exits towards a job, a work-study programme or a training programme leading to a qualification is 72%. In addition to the strong commitment of the teams, these positive results are linked to the roll-out of the skills-based approach, which allows us to optimise the methods for supporting trainees, and to the strengthening of public policies in favour of young people (Plan "1 youth, 1 solution", etc.). This success is also due to the strong partnership with companies, but also to specialised courses such as the EMMA course (Engagement and Mobilisation around Animation Professions).

Services offered by the Maison de l'Emploi

Based in 7 sites shared with the Mission Locale, the Maison de l'Emploi employment service caters for all sections of the population, helping them in their search for or return to work in partnership with the Pôle Emploi (French job centre), business networks and associations. To do this, it co-develops projects and initiatives with business networks in order to bring the supply of jobs in line with demand for employment. In addition, it performs specific actions on tense sectors within the metropolis.

In 2021, the related work focused on the following 7 sectors: digital, market gardening, cleaning, industry (including food processing), transport-logistics, personal services, health care for the elderly.

Within this framework, the ATDEC mobilised its partners and companies through working groups and steering committees (152 meetings in total) in order to prepare appraisals, priorities and action plans...

Highlights in 2021 included:

- 10,624 visits to the 8 employment cyberhubs by 7,250 users;
- Average of 604 unique visitors / month;
- 1,816 new registrants;

The ATDEC undertook actions to bring together the supply and demand for employment and to support the integration process:

- promotion of jobs and tense sectors: 87 attractiveness actions;
- recruitment assistance: 124 pre-recruitment actions and 2 forums (852 hires);
- audience preparation and reduction of roadblocks: 226 actions.

• Removing barriers to employment and preventing discrimination in employment

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Nantes Métropole is actively involved in combating discrimination and promoting diversity and equality. It strives to facilitate the pathways to employment for the inhabitants who are furthest from it by acting, at its level, on the obstacles to employment, the securing of pathways and access to employment, notably for inhabitants of the City's priority neighbourhoods (QPV).

The "language pathways" scheme implemented in conjunction with the City of Nantes' Mission for Equality took shape in 2021 with:

- launch of the Evaluation Linguistic and Orientation (ELO) platform): created in collaboration with the Loire-Atlantique department to structure a "language assessment and orientation" function for the entire urban area;
- more than 1,000 people received at the ELO platform, including 2/3 of those in professional integration welcomed at the Maison de l'Emploi offices, were referred to a language training programme in line with their professional project;
- support for 3 language actions with a professional objective for inhabitants of the City's priority neighbourhoods with very low qualifications.

In addition, in 2021, within the framework of the mobility platform, a new motorized two-wheel vehicle rental action (Mobil'Actif) was set up to supplement the existing actions: social driving school, solidarity-based garage, low-cost vehicle rental, training in autonomous mobility.

Nantes Métropole is also working to combat discrimination in employment by supporting actions aimed at employers, economic players and employment professionals: awareness-raising actions for recruiters through the LCD Game (Mozaik RH), a "resource" group run by the Maison de l'Emploi to support more inclusive recruitment practices, and training for professionals who can act as gateways to employment.

Securing the path to employment for the most vulnerable and priority groups

Nantes Métropole promotes access to employment for the inhabitants of the City's priority neighbourhoods (QPV) through support for projects deployed in the neighbourhoods. In 2021, 29 projects were supported for the benefit of more than 900 residents of the territory's priority neighbourhoods: interview preparation workshops, confidence building, development of job search skills, mentoring, job discovery, job dating, reinforced support towards employment or work-study.

Finally, within the framework of the Local Contract for the Reception and Integration of Refugees (CTAIR), signed with the State and the City of Nantes for the 2020-2022 period, Nantes Métropole co-piloted actions aiming to provide tools and training to intermediary employment professionals who accompany migrant populations.

For the 2nd year of implementation:

- renewal of the "Accompanying migrants to employment" training course, co-constructed in partnership with Alliance Europa (University of Nantes) and intervention of ENIC-NARIC on the recognition of foreign diplomas. More than 60 professionals trained in 2021;
- experimentation of a legal support hotline service to facilitate the integration of migrants seeking employment. More than 200 individual situations were resolved, thereby avoiding interruptions in the integration process.

Specific support for residents struggling to find employment

Within the framework of the Local Plan for Integration and Employment (PLIE), a scheme co-financed by the European Social Fund (ESF), ADTEC coordinates integration actions and offers reinforced support to those facing the greatest difficulty in finding work until they are in lasting employment. The objective of the various implemented actions is to respond as closely as possible to the needs of the public so as to achieve successful professional integration.

Achievements in 2021:

- 1,655 people supported (of whom 75% were educated to CAP/BEP-level or lower, 26% were senior citizens aged 50 and over and 38% were residents of priority neighbourhoods);
- 46% of people obtained at least one work contract in a regular environment (excluding integration through economic activity and protected environments).

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With the support of the ESF and Nantes Métropole, several actions were carried out to support the accompanied people in terms of the preparation of their integration pathways, particularly in the removal of roadblocks to employment.

In 2021, word processing workshops were organised by Orange Solidarity. Specific modules were also proposed to seniors thanks to the partnership with the association Médiagraph. With ESTIM numérique, an association that works for gender diversity in the digital sector and the increase of women's skills in the digital professions, participants were invited to the "Te[a]ch-me" event. They received free computer equipment and personalized support in learning how to use the tools, notably through a partnership with BNP Paribas. Finally, a reflection was initiated with Digital4better, as part of a skills sponsorship, in order to continue to imagine tools that will prompt participants to use digital technology, which has become indispensable in the search for employment as well as in the steps of daily life.

Again this year, the PLIE, together with its operators and partners, contributed to the implementation of innovative actions in favour of access to employment.

In 2021, Nantes Métropole also continued to support 40 integration via employment organisations. Every year, these bodies help to provide on-the-job experience for 3,300 people who are having difficulties finding work (around 1,076 full-time equivalent employees).

Nantes Métropole's involvement in this sector can be summed up in three roles:

- as a financier (with a dedicated budget that increased in 2021 to nearly €1 million);
- as a principal (by carrying out workforce integration hours on public contracts);
- and as a facilitator (through its presence in workforce integration bodies in the local area and on the steering committees for various structures, and through project ownership assistance who acts in favour of workforce integration hours, etc.).

In 2021, Nantes Métropole committed itself for two years (2021-2022) to co-finance, alongside the State and the Department, the roll-out of the "Premières en Chantier - Convergence" project that allows people in situations of extreme exclusion, mainly on the street or in the hospital, to start a pathway to integration by joining an insertion project and accessing accommodation. The support provided by the community aims, in the long term, to perpetuate this service offer within the Nantes Métropole territory.

Finally, Nantes Métropole is mobilising to support and co-finance the project engineering of two Territoires Zéro Chômeur de Longue Durée (ZZLT) experiments within the territory. Nantes Métropole is recognised as an emerging TZCLD project, on the programming level, by the eponymous association.

Integration through procurement: leveraging the "social clause"

Since 2004, Nantes Métropole has been using its public procurement contracts to encourage companies to create jobs and foster integration through work. It includes socio-professional integration clauses, stipulating that a portion of work must be set aside for people on integration schemes in the building, public works, green spaces, environment, cleaning, intellectual services and service sectors.

This initiative is a means of promoting jobs for people who face the greatest difficulties in finding employment. It also provides a means of supporting employability organisations through economic activity and employer groups working to promote integration and qualification.

The initiative has a dedicated 6-person team (5.4 FTE) and provides support to purchasers and companies. More specifically, this involves defining and implementing clauses, getting employment and integration professionals together, and assessing initiatives. Nantes Métropole is taking part in the scheme with 74 contracting authorities.

In 2021, more than 1,400 people received an employment contract on nearly 800 contracts, thanks to the workforce integration clause. Of these, 18% gained access to a work-study qualification. This was made possible thanks to the mobilisation of more than 700,000 hours of integration carried out by more than 300 companies and integration through economic activity structures. 2021 is a record year for the number of hours of work reserved for people who are far-removed from the employment world.

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THE ECONOMIC PROGRAMMING OF THE CITY'S FACTORY

Climate change and the consideration of ecological concerns are raising questions about urban sprawl. They have a direct impact on how the city is produced, with the development of new spaces to accommodate economic activities, rapid transformation of consumption patterns (development of e-commerce, short circuits, search for proximity), work (nomadism, remote work, development of co-working), and travel (soft mobility). These developments have accelerated over the last two years in response to the health crisis.

With a still very dynamic demographic growth (26 new inhabitants/day), an unemployment rate at its lowest (6.4%), a historical record of tertiary transactions, major commercial centres that are thinking about changing their model, companies that are turning to hydrogen, and significant investment projects in the sustainable economy..., 2021 will remain a pivotal year with the rapid emergence of new dynamics of transitions that will structure the future and are already shaping the present.

2021 marked by the health crisis and the continuing very strong economic dynamic of the territory

The health crisis did not have the feared negative impact on the metropolitan economy. With favourable economic indicators, it is even showing signs of overheating, notably with strong tensions appearing in the areas of recruitment, inflation and material supplies.

The sectors considered to be the most affected by this crisis regained very strong momentum starting in 2021 (hotel industry, event management, tourism).

The tertiary sector reached an all-time high, with 130,000 m² of transactions in 2021, positioning Nantes as the 4th French metropolis in this area. The roll-out of remote working has not yet had an impact on the demand for office space, which remains at its highest level.

Another trend observed on the heels of the health crisis concerns emerging sectors of activity with a significant evolution of projects around ecological, societal and environmental transitions. The crisis undoubtedly accelerated the local deployment of initiatives in these sectors, such as renewable energies (including marine energies), new propulsion, the circular economy or food.

In addition to these "native" positive-impact business sectors, many companies have taken advantage of this context to rethink their business models by developing new, more responsible and sustainable products and by integrating a much stronger internal CSR dimension.

Deployment of the productive city

2021 also brought to light the difficulties for companies in the field of productive activities (industry, crafts, wholesale trade, logistics) to find the land and real estate necessary for their development. Land capacities in business parks in the Nantes Métropole territory are no longer sufficient to meet current needs. The inventory of business space shrank from 260,000 m² available in 2016 to fewer than 70,000 m² in 2021.

The start of marketing of the Belle-Etoile business park in Carquefou should make it possible to create a much-awaited offer for companies. The work undertaken, within the framework of the alliance of territories, concerning economic land, logistics and the deployment of third places should make it possible to offer new reception conditions for companies in search of solutions.

In this context, 2021 saw the development of more and more sustained projects of craft or industrial villages by real estate operators, which constitute answers to the needs expressed. These dense and vertical projects make it possible to limit land consumption (and therefore reduce costs), as well as to imagine more sober and economical spaces for companies.

Nantes Métropole's Business Real Estate Assets (PIEM)

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To ensure that all businesses have suitable premises, Nantes Métropole offers a range of public commercial property. The new public service delegation contract was rolled out after its renewal at the end of 2020 with Nantes Métropole Aménagement.

The Nantes Métropole real estate offer is focused on supporting business creation or development and backing of specific strategic sectors, such as the 8 business incubators and company premises offering shared services for start-ups (Nantes Créatic, Rezé Créatic, Couëron Créatic, Hub Créatic, Mallève Bureaux, Mallève II, Bio Ouest Île de Nantes 1). In figures, it represents:

- 23,393 m² of rental space;
- 234 tenants, 868 jobs;
- 52 new tenants in 2021 including 31 entrepreneurs;
- 92.40% occupancy rate.

Trade resists the crisis

As in the previous year, 2021 was a very particular year for businesses in the local area with a third lockdown and a new period of closure for many businesses. In this context, Nantes Métropole continued its actions to encourage the sustainable recovery of commercial activities. This was demonstrated by the support for the deployment of the local sales platform “Ma Ville Mon Shopping”, the implementation of an action to assist merchants in the digital transition (a “shared community manager” partnership) or communication measures for the general public to promote local consumption.

Nantes Métropole also continued its efforts to enhance the attractiveness of the city centre (collective reflection on the city centre of tomorrow, validation of a partnership action plan, etc.), to promote the development of local businesses (economic study conducted in Rezé Château, call for projects for the Breil shopping centre in Nantes, etc.) and in terms of urban renewal of major commercial centres (launch of a private urban project on Paridis, urban studies carried out on the route de Vannes and the St Seb’boulevard / Frêne Rond sector).

The commercial spaces observatory conducted at the end of 2021 did not identify any negative signals related to the health crisis. The vacancy rate, estimated at 6% of the 9,500 premises surveyed, is relatively low (10% on average in metropolitan areas). This demonstrates a positive business dynamic despite some market tension.

Across Nantes Métropole, the commercial offer is globally balanced, with a strong polarization and a marketability rate of 72%. However, there are some disparities between the territories of the conurbation.

In 2021, the indicators remained positive at the city centre level, with a low vacancy rate (6% including 3% vacant premises), a high marketability rate (low share of non-market services).

The strategy adopted for the city centre is to convey its difference and uniqueness by working on the commercial offer as well as on the Nantes City Centre destination, combining shopping, culture and heritage.

In commercial terms, differentiation involves the emergence of little concept stores, whose spatial concentration creates a distinctive identity and sets Nantes’ city centre off from the outskirts; also, differentiation is achieved by hosting national or international brands that are leaders on their market and the sole representatives within Nantes Métropole.

The average turnover rate of commercial premises currently stands at 7%. 2021 was marked by a lower rate of renewal than in 2019 and before the health crisis. There were 76 takeovers in 2021 compared to 178 in 2020, with an average of around 130 before 2019.

These new outlets are distributed throughout the city centre, with a greater concentration this year on certain main axes (notably rue Contrescarpe, Marne-Verdun sector). Vigilance is being exercised on Contrescarpe Street, which has experienced a high turnover rate for the past 3-4 years. The new concepts and brands are fully in line with consumer expectations (organic, fair trade, Made in France, bespoke, sustainable, etc.).

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ALLIANCE OF TERRITORIES THAT IS INDISPENSABLE ON THE ECONOMIC LEVEL

The alliance of territories is based on the need for territories to act together and take into account the interdependencies that bind them. While Nantes Métropole funnels its resources (capital, skills, private- and public-sector services, training opportunities, leisure, care, facilities and venues, etc.) into its neighbouring areas, its vibrancy, identity and quality of life stem from the adjacent regions' farming and energy industries and assets (heritage, landscapes, coast).

It is a question of recognising the interdependence between urban, peri-urban and rural areas in order to work together on issues and make progress while preserving each territory's autonomy. The objective is to go beyond administrative boundaries to better address issues that affect the daily lives of residents (e.g., commuting to and from work) and to support transitions by understanding them on the right scale, beyond the Nantes Métropole perimeter.

Nantes Métropole is leading this inter-regional dialogue ("the alliance of territories") in a spirit of reciprocity, sharing of resources and assets, and regional cohesiveness, all with a view to crafting win-win, virtuous dynamics spanning the wider urban area. This dialogue with neighbouring territories is conducted with respect to territorial balance (employment, housing, mobility) on the one hand, and with a view to sharing resources (food, energy) on the other. The aim is to co-produce public action that will best meet the needs of inhabitants, users and socio-economic actors, by sharing strategies, exchanging practices and developing joint operations. As such, territorial strategies can converge on a larger scale so as to meet the energy and climate challenge.

The "Responsible Economy and Employment" public policy, directly linked to the "Alliance of Territories" imperative, aims to bring about a successful change of scale concerning the policy of receiving companies and jobs so as to move towards a rebalancing. Adapting to the climate emergency and embracing reasoned, measured land use while better spreading employment across the region calls for a closer look at companies' premises and how land destined for businesses is to be used beyond the Metropolitan scale. 2021 was also marked by the development of roadmaps (finalized or in progress) co-constructed with neighbouring territories.

Pôle équilibre territorial et rural du Pays de Retz

The roadmap developed with the Pôle équilibre territorial et rural du Pays de Retz was finalized and adopted in 2021. It is organised around 6 strategic axes:

- facilitate the establishment of companies and the development of their activities in an extended territory by building a coherent global offer;
- improve the quality of the business zones;
- encourage the development of oversight policies in the business zones;
- Identify the observed problems and common issues at the logistics level;
- develop the potential of co-working spaces and third places to boost the economy, promote synergies, reduce travel and develop social ties;
- strengthen the cooperative culture in a forward-looking and continuous improvement approach by collectively learning about economic changes.

Technical meetings will be scheduled in 2022 for its implementation.

Nantes Saint-Nazaire metropolitan area

Within the Nantes Saint-Nazaire Metropolitan Cluster, the development of a roadmap was also initiated

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with the “economy” vice-presidents of the relevant EPCIs (Public Establishments for Intercommunal Co-operation). The Metropolitan Cluster’s intervention is focused on consolidating the strategic vision, sharing ambitions and values in favour of the efficient and equitable reception of jobs. The completed work should bring to light desirable experiments in business parks and in urban core areas.

Problematic areas have already been targeted:

- Promote the inter-knowledge of the urban economic fabric and economic dynamics to put the coordination of territorial strategies on the collective agenda;
- optimised use of land (urban core areas and business parks) in a perspective of land sobriety and adaptation to climate change;
- improvement of the distribution of jobs throughout the territory.

Actions were targeted:

- to get to know each other better, to share strategies, particularly with regard to the future of the Grand Port Maritime and “carbon-related” activities;
- to jointly identify the land available for densification, recycling, measured extensions and to pool knowledge or even to take joint action on the problem of urban changes in business parks;
- to organise training sessions on the various types of logistics (industrial, urban, e-commerce) and their challenges, before defining a common course;
- to present the Nantes Saint-Nazaire Développement tool to the federations of municipalities (its activities: territorial marketing of the territory at the national and international level, external prospecting for companies and talents, trade shows, etc.; its operation and its means). Each community will assess whether or not it is worth going further in all or part of the activities of Nantes Saint-Nazaire Développement.

2022 will make it possible to specify the operational aspect of the actions to be carried out and to launch them.

Erdre et Gesvres Federation of municipalities (CEEG)

While the Metropolitan Cluster remains the preferred place for exchanges on major economic strategies (densification of economic activity parks; telecommuting / co-working / third places...), the bilateral exchanges between Nantes Métropole and the CCEG are nevertheless interesting on some subjects (ground floor real estate, trade, improvement of the quality of business parks, eco-construction, logistics, etc). After initial contacts in 2021, the objective is to formalize shared actions in 2022 within the framework of a partnership agreement.

Loire-Brittany metropolitan area (PMLB)

Within the PMLB, in the field of economy, two political moments between the elected officials provided for an exchange of experiences, evaluation of the health crisis context, support measures and economic recovery actions implemented by each other. From a more forward-looking perspective, the aim is to assess the consequences of the health crisis on the economic development strategies of the major cities in the West. Note the postponement of trade shows (Simi and MIPIIM planned for 2021) in which the PLMB will participate in 2022.

PROJECTS FOR MAJOR PUBLIC FACILITIES

In order to pursue its ambitious urban development policy and further enhance its national and international appeal, Nantes Métropole is building major facilities that contribute to the dynamism of the local area.

The new Nantes train station

France's sixth-largest regional station, Nantes station and its multimodal exchange hub continued in 2021 their transformation initiated in September 2017.

Some 11 million passengers currently pass through the station each year, with this number expected to reach 25 million by 2030. Faced with this growing use of the facilities and in order to consider the related urban and intermodal challenges, the station underwent a thorough modernization. It was also enlarged to make it more ergonomic and to offer passengers much better services and comfort.

While the new mezzanine and the renovated north and south buildings were opened to the public in November 2020, the SNCF and Nantes Métropole continued the redevelopment of the Nantes station multimodal exchange hub (PEM) in 2021 (in partnership with the State, the Pays de la Loire region, the Loire-Atlantique department and with ERDF - European Regional Development Fund - funding from the European Union) in order to welcome users of all modes of transport in the best possible conditions.

On the north side, the SNCF construction site gave way to the Cyclo Station. Inaugurated on 15 November 2021, it offers nearly 700 sheltered and secure self-service bicycle spaces, an tyre inflating and repair service, and 40 BiclouPlus stations. This equipment now makes it easier to switch from one mode of travel to another.

In the south, Nantes Métropole supported the preliminary studies and work carried out by the SNCF with the aim of obtaining the necessary rights-of-way for the completion of the Pré-Gauchet Comprehensive Development Zone. The last technical building linked to the station - the SNCF-Réseau telecom centre - was demolished in the spring of 2021, following its repositioning in the heart of the Pré-Gauchet ZAC.

This important step marked the end of the operations to free up the railway land adjacent to the station, to the benefit of the modernisation of these technical installations and the development of a new mixed and attractive district. It also allowed for the reconfiguration of public spaces adjacent to the South Station, in particular the extension of Berlin Boulevard and the development of the forecourt, which will be delivered in 2022, along with the new "South Station" TAN station.

Finally, the architectural project for the future EMP South building was chosen. It will notably include a mixed-use building (offices and public facilities), bicycle parking, a taxi stand, a bus station and car rental services.

A Park-and-Ride (P+R) car park in Neustrie

Under the Nantes Métropole travel policy, in October 2016 the Metropolitan Council approved plans to build a P+R car park at Bouguenais, at the end of tramway line 3 (Neustrie). The construction started in spring 2019 and was completed in January 2021.

This new facility, directly connected to the bus and tram platforms, offers users 949 car spaces, compared to 314 previously. It also houses 50 secure BiclouPark bicycle spaces, 20 motorcycle spaces and 10 electric charging stations.

University building in Rue Bias

Under the planning agreement between the national and regional governments (CPER), Nantes Métropole is the project owner of a university building situated at 10 rue Bias in Nantes. The project is part of the university training master plan and will accommodate students in the first year of a health-related course or studying at the pharmacy training and research unit, users of the health university library, doctoral students and research professors, the University's administrative staff, and everyone

during events (type L). Following design studies for the project conducted in 2018, the building is scheduled for delivery in the summer of 2022.

Plan to transfer the Nantes-État railway yard

The Nantes-État railway yard, which is currently located on a 15.8 ha site in the west of Île de Nantes, is going to be transferred. Locating the railway yard to the Nantes Blottereau site will serve the objective of optimising the railway system's operations in the conurbation.

At the same time, the project will maintain a capacity for turning trains on the railway line along the route de Pornic in the municipalities of Bouguenais and Rezé, while improving the operational quality of this line which serves the Grand Port Maritime de Nantes Saint-Nazaire.

In addition, this project aims to free up the railway land located at the very heart of the future metropolitan centre so as to allow the development of the ZAC Sud-Ouest and, in this way, to fight against urban sprawl.

At a total cost of approximately €118 million, funded jointly by the French Government, SNCF Réseau, the Region and Nantes Métropole (€86 million), the transfer is scheduled for the end of 2022.

The University Hospital (CHU) and health district

The University Hospital and the health district aim to give the metropolitan area a 21st century public hospital set on an extensive site dedicated to healthcare, which, in a single highly accessible sector, will accommodate: health care, higher education (with the future health faculty bringing together medicine, physiotherapy and nursing schools, and paramedics) and research (existing IRS2 and biotech and future IRS2020).

Nantes Métropole, in conjunction with the SAMOA and its management, contributed to:

- the preparation of the land base (dismantling of the port hangars and the MIN transferred to Rezé, provisional access road, etc.);
- the definition of the urban project for the south-west of the Île de Nantes, thanks to the work of the new project management team (Jacqueline Osty and Claire Schorter) who have come on board to integrate the future University Hospital in the natural landscape of the Île;
- the development of the interfaces between the project of the future University Hospital on the Île de Nantes (building permit obtained mid-2019; start of construction in September 2020) and the future neighbourhood; the same work is underway with the Region, the University, the CHU and the State for the future health faculty opposite the future CHU;
- the launch of the related accessibility projects that the project will require (tram line, widening of the Anne de Bretagne bridge, car parks, etc.).

DEVELOPING A SUSTAINABLE CITY, ACCESSIBLE TO ALL

Nantes Métropole is working to shape the city of the future by ensuring balanced local development, boosting urban centres and curbing urban sprawl. To do this, it is developing the conurbation as part of a larger development area.

The launch of the first modification of the Local Metropolitan Urban Plan (PLUm)

The Metropolitan Urban Planning Scheme (PLUm) was approved by the Metropolitan Council on 5 April 2019. It is a necessarily evolving document to accompany the development and planning of the metropolitan territory.

The first modification procedure of the PLUm was initiated in April 2021 in order to consider the evolution needs linked to the projects and to complete the various corrections or updates of the document. In particular, it is a matter of taking into account the feedback from its implementation and integrating legislative or regulatory changes.

The extension of the territory's project in order to tend towards the Zero Net Urban Developments Objective.

Nantes Métropole is taking a gradual approach to implementing the land-use planning project of the future. On the one hand, it is a matter of including the changes in the mandate linked to the consideration of environmental issues, and on the other hand, of responding to the need to find the capacity to produce housing, given the observed demographic dynamics.

In this context, the aim is to accompany the territorial dynamics and to meet the needs of the municipalities, with the objective of preserving natural and agricultural spaces and regaining biodiversity. Therefore, the implementation of the principle of the city's renewal on itself must be extended.

This more intense city must nevertheless remain desirable and pleasant for its inhabitants: the provisions for defining the conditions will be at the centre of the great citizen debate of 2023.

Coordinating urban development programmes in comprehensive planning areas: nearly 40% of new homes

Programmes in comprehensive development zones (ZAC), which fall under the responsibility of the Community, enable local authorities to control land use, build necessary infrastructure, meet objectives in terms of social housing and affordable housing in line with Nantes Métropole's PLH 3 Local Housing Programme. The ZAC procedure also makes it possible to encourage innovation, as well as architectural and environmental quality by imposing specifications drawn up by town planners, developers and local authorities.

In support of the ecological transition roadmap, Nantes Métropole aims to develop the rapid increase of wood and bio-sourced materials, with the aim of reaching a target of 20% of wooden buildings in the metropolitan area by 2025 and to increase this target to 30% in public development operations (ZAC). A call for expressions of interest in wood and bio-sourced materials was launched in partnership with Atlanbois to support a number of innovative projects and promote the development of the sector. However, this came to naught due to the municipal elections and team changes.

Major undertakings in 2021 included:

- ZAC Doulon-Gohards in Nantes: single public inquiry for the environmental authorisation, the DUP (Declaration of Public Utility) and the land survey, continuation of the school works, commissioning of 3 urban farms and continuation of the works, submission of the building permit (200 housing units) of the Vallon des Gohards Nord 1st fragment;

- ZAC Mellinet in Nantes: continuation of the development work on the site and the school, delivery of the first phase of the Anna Philip park, delivery of 108 housing units; Continuation of studies and validation of 5 real estate projects (342 housing units) with a strong focus on the low-carbon aspect of the constructions and the implementation of a very innovative construction system (wood structure, hemp concrete filling, lime coating as a finish); inauguration of the Project House; initiation of consultation in 2021 concerning the development of the Place du 51^e Régiment d'Artillerie;
- ZAC Champ de Manœuvre in Nantes: the final alterations of several roads are being finalized, including the central courtyard and the mall. The new school will be delivered in September 2022 and the neighbourhood's first residents will arrive in early 2023;
- ZAC boulevard de la Baule in Saint-Herblain: Boulevard Charles Gautier was given a new, urban and peaceful face, with the completion of the development of public spaces and green areas to encourage the emergence of this new neighbourhood life, bringing together local residents, new inhabitants and users. The development of mobility and green spaces is naturally essential, as is the mix of uses and populations at the heart of the various programmes. While the Charles Gautier boulevard is green and peaceful, it is also active, useful and inhabited. As for the regional health centre, the site has housed all operations, including the Sourdille ophthalmological institute, since the end of 2019. The diversity of medical expertise is at the heart of the identity of the Santé Atlantique establishment;
- ZAC Cœur de ville in Les Sorinières: sited on nearly 2 ha of brownfield in the heart of the town centre, this urban renewal project involves the construction of 185 housing units, the creation of a new retail spaces, a local supermarket and a new public square. The housing project on the south block made good operational progress in 2020, and the first work on the new square began at the end of 2021;
- sales are continuing for all of the operations: Western city centre and Métairie (Couëron), Les Vignes (Les Sorinières), Vallon des Garettes (Orvault), La Jaguère (Rezé), Les Ormeaux (Bouaye), Les Vignes (Les Sorinières), Les Perrières (La Chapelle-sur-Erdre), Le Verger (Carquefou), Erdre Porterie and Bottière Chénaie (Nantes), Rue du Moulin (Nantes);
- the Halvêque-Beaujoire-Ranzay urban renewal zone: a major metropolitan economic development site along the Route de Paris, the zone has been positioned as a major business hub as part of a strategy of rebalancing the expansion of the tertiary sector towards the East. The project will include the much-needed transformation of the two major shopping centres Paridis and Beaujoire into mixed urban districts around the Route de Paris, which will become the main focus of urban renewal in the zone. The industrial activities of the Haluchère-Batignolles district will remain as they are;
- urban studies: continuation of the study for the reconversion of the IUT Joffre site; launch of the consultation for the global urban study on the Stalingrad / Dalby / Allonville sector to be launched in 2022; continuation of the Nantes South urban study; the continuation of the urban, economic and mobility planning study for the road from Vannes to Nantes, Saint-Herblain and Orvault, in order to eventually define the urban renewal strategy for the artery from Beauséjour to Cholière-Marcel Paul. This urban planning study must envisage the renewal of the route from a global perspective (avoiding an opportunity-based transformation) while affirming and consolidating urban, landscape and commercial quality on both sides of the route. It is linked to other public policies (notably transport, and specifically the master plan for cycle routes). Scenarios for a guide plan are studied for each of the sequences;
- an urban strategy and planning study is being carried out in the district around the Atlantis shopping centre with the aim of defining the conditions needed to establish an urban core area in the sector. This therefore involves a thought process on the future of this neighbourhood in order to determine an urban development strategy and enable renewal in the medium and long term.

In 2019, new agreements with the ANRU (National Agency for Urban Renewal) also came into effect in Nantes Métropole.

- ZAC Bottière Pin-Sec in Nantes: start of work on the heart of the neighbourhood with the partial demolition and requalification of the shopping centre and the construction of new housing; continuation of the restructuring and extension works of the Urbain le Verrier school and of the alterations in the rue Champollion and rue Valenciennes, in the Pin Sec sector; realisation of pre-operational studies on public spaces and redevelopment of the Souillarderie Basinerie Becquerel sector, with the project for the public facilities centre; continuation of studies prior to the creation of a third-party centre in the heart of the neighbourhood; commissioning of the Project House in September 2020, with ongoing citizen dialogue workshops;
- ZAC Grand Bellevue in Nantes and Saint-Herblain: this urban renewal project covers 61 ha and is expected to enable 1,000 housing units to be created. A health centre, a sports facility and possibly a small-business cluster are expected very soon. The project manager has been appointed: Devillers et Associés. Preparation work is currently underway on the AVP (pre-project study);
- Nantes Nord global project: impact study and DUP file submitted and examined; creation of the ZAC at the end of 2021; continuation of regulatory and technical studies; development of the Water Law file, ESSP (public safety and security study) appraisal, finalization of the AVP of public spaces on Bout-des-Pavés/Chêne-des-Anglais; progress of the Boissière shopping centre renewal project (negotiations by the developer and delivery of the building permit for phase 1);
- Dervallières in Nantes: the project is part of a new regional ANRU agreement. The development of public spaces around the Grand Watteau began at the end of 2020, for delivery in the summer of 2021. In the continuity of the redevelopment of the Grand Watteau, launch of a study by NMH on the rehabilitation of adjacent buildings in the Lorrain de la Tour sector. Finally, as part of the development concession for the place des Dervallières, the project management team of MAP Paysagistes / Ville Ouverte / A2I Infra was selected in 2020.

Nantes Métropole is also working on other of the City's priority neighbourhoods in cooperation with the relevant municipalities:

- Plaisance in Orvault: approval of a master plan as part of a dialogue-driven process with the neighbourhood's residents and stakeholders;
- Breil in Nantes: continuation of urban studies on the future of the Breil square;
- Château Rezé in Rezé: urban renewal sector of this city priority neighbourhood, the pre-operational studies were started in order to finalize the AVP phase during the 1st half of 2021.

Key figures in 2021

- 42 operational perimeters defined for metropolitan housing development projects.
- 17 operational perimeters defined for economic development projects.

THE METROPOLITAN AREA'S URBAN CORE

The heart of Nantes Métropole continues to develop. Nantes Métropole has set out to imagine a new centre for the conurbation, to build a European city that is natural, vibrant, human-scale, convivial, compact and influential in both cultural and economic terms.

This renewed ambition has prompted it to undertake a growing number of major projects, and make the river and nature a core feature of the city: a commitment that systematically underpins and structures the intentions of the local authority, developers and contractors. The vision for the urban core is all-embracing now, but it is careful to cultivate the distinctive features of each space and neighbourhood. The aim is to build a pleasant everyday living and working environment for the city's residents and employees, to be enjoyed by the residents of the conurbation and discovered by its visitors.

In time, 300 hectares of Nantes' urban core are to be reinvented. The assets to leverage for this purpose are numerous: an ambitious mobility policy currently under consideration that includes two tramway lines and a Busway line, and a project to widen the Anne de Bretagne Bridge by 2026.

The Île de Nantes:

The Île de Nantes is the focus of a major urban development project designed to consolidate the centre of the conurbation by establishing the full range of urban functions: housing, economic activities, shops, public facilities and local services. It is being led by Nantes Métropole and implemented by the SAMOA.

The development of the Île de Nantes is currently concentrated on its southwestern part. As part of this movement, the wholesale agricultural produce market (MIN) was relocated in March 2019, to be followed by the railway goods sidings in 2022. Eventually, this sector will be home to a genuine city neighbourhood, as well as a health cluster integrating the future university hospital, research institutes and the faculty of health.

The team, organised around Jacqueline Osty and Claire Schorter, has defined the intentions that will shape the main lines of the urban project for the next 20 years: the deployment of a system of parks and natural landscaping, a restructured travel scheme (active, tram and car) and a diverse range of housing, work, study, recreation and personal cultivation options. Underpinning this development is a manifesto for a sustainable island (Ile de Nantes): one of shared interests, mobility, resilience, and well-being (promoting health and well-being through nature, rest and solidarity). The urban project fully participates in the two markers that are the ecological transition and equality.

The new République neighbourhood, which includes 20 ha set aside for urban development and where the worksite began in 2021, will spearhead a new urban ambition: to use nature to provide future residents and workers with a distinctive, eco-friendly environment.

Eventually, the south-west of the island is expected to house:

- nearly 1 million m² of built space;
- 350,000 m² of structuring facilities (future university hospital and related programmes, FAC, EFS, etc.) and approximately 20,000 m² of local facilities (school group, gymnasium, eco-point, community premises, etc.);
- 360,000 m² of housing (at a rate of 6,000 housing units for 12,000 new inhabitants);
- 230,000 m² of offices, businesses, services and shops.

New University Hospital: the earthworks were carried out in 2021. New temporary bypass roads were built.

The facilities: a flagship project was delivered in 2021: the "5 Bridges", a mixed and interdependent operation comprising: day centre, night shelter and shelter for the homeless; family housing, offices, social restaurant and urban farm on the roof. Nearby, the O'Slow project was also delivered, including a CROUS student residence of 120 units. Within the new République neighbourhood, the building permit for the Red Cross social village, "Henry's House," was granted in 2021 and construction will

begin in 2022.

The Creative District: well in progress, the rehabilitation of the Halles Alstom site is continuing. 2021 was marked by the delivery of Hall 6 East in the Creative district, and a digital and creative business hotel with 6,000 m² of floor space.

Prairie au Duc: to the west of the Ile de Nantes, the new neighbourhood's development is continuing, with the start of work on the "Fusion" operation (59 housing units and a 47-room youth hostel), the launch of consultations for mixed-use programmes at the western end of the boulevard (blocks E and J, approximately 25,000 m² of floor space) and the continuation of work on the Nantes Atlantique Design School, which is scheduled for delivery in 2022.

The implementation of new emblematic operations: their development continues in the fragmented sector with the start of construction of nearly 300 housing units in 2021, or the extension of the Beaulieu shopping centre.

New public spaces: The park system in the southwest of the Île de Nantes will enter its operational phase in 2021 with the launch of design studies for the Estuary Gardens, which will be the subject of a citizen dialogue.

The historic city centre

The Feydeau-Commerce zone is taking shape

An emblematic site in the historic centre of Nantes, the Feydeau-Commerce sector is undergoing a major makeover as part of a massive project to restructure the route from the station to the Loire. The redevelopment of this 27,000 m² area will provide generous pedestrian spaces and enhance the presence of nature in the city. Work has been underway since 2018. The first significant achievements were delivered in 2020.

The ongoing transformation of the historic centre

- **Transformation of the site of the former prison**

After the first deliveries in 2020 for the Descartes parking lot and the first housing units in Buildings A and C, the rest of the operation was delivered in the first quarter of 2021, including the "La Boîte à Musique" childcare centre, which opened its doors in June 2021. The whole operation was inaugurated in the presence of the Mayor-President on 21 September 2021.

As such, this new neighbourhood open to the city and to nature will consist of 154 housing units, including 77 social rental units (including 12 inclusive housing units), a 40-seat multi-purpose childcare centre, and a restaurant with an auditorium around a central landscaped area open to the public during the day.

A public space, the Harouys Mall, to the north of the operation, is laid out as an orchard, providing a breathing space and planted continuity with the Faustin Hélie Square. The creation of a new entrance to the square from the Harouys mall is being studied in order to ensure pedestrian continuity between the two green spaces.

- **La Tour Bretagne**

This ageing high-rise building has suffered a number of malfunctions and a level of obsolescence. However, its emblematic character and central location provided good reason for a full regeneration and major restructuring project on the building.

Before embarking on a project of this size, the trade union council, made up of the main owners of the Tower, including Nantes Métropole, agreed to launch an exploratory technical feasibility study for the development of La Tour Bretagne. This initial exploratory approach carried out in 2019 was continued in 2020 with additional diagnostics and more in-depth technical studies, that served to further confirm the technical knowledge of the Building, with a view to organising a project management competition.

2021 was also an opportunity to deepen the reflections on the programming of the Tower's rehabilitation project.

Other miscellaneous projects

- **Approaches to city hall**

The reflection begun as part of the City Hall Surroundings study, which was completed in 2020, continued in 2021. A working group led by the Regional Directorate for Urban Development (DTA), along with other concerned departments (DEP and DNJ), made it possible to draw up programming guidelines and a timetable that will be submitted for arbitration in 2022.

- **The transformation of the “Notre dame du Bon Conseil” site**

The Community is working to support the private initiative project. It concerns the programming of the project and the development of public spaces adjacent to the operation. The challenge is to conclude an urban partnership project (PUP). 2021 was devoted to preliminary studies that culminated in the filing of the building permit in January 2022.

- **The renovation of the Dobrée Museum**

Nantes Métropole is closely involved in the progress of this project, led by the Loire-Atlantique Departmental Council, specifically on the issue of the interface between the museum site and the surrounding public spaces. A community dialogue process was initiated at the end of 2020 and carried out in the 1st half of 2021 for the development of Place Jean V and Rue Voltaire, both adjacent. The aim was to draw on the expertise of the inhabitants, local residents and users of the square to provide input for the project management team, Agence Paume, with regard to the definition of the development programme for public spaces that was presented to the neighbourhood inhabitants in the autumn of 2021.

Petite-Hollande - Banks of the Loire: the “Loire au Coeur” project

The architects agency TER has been tasked with creating a vision for the transformation of Nantes' city centre on the northern bank of the Loire, to be completed by 2030, between the Saint-Félix canal and Bas-Chantenay. Achievements include:

- **coherence plan:** following the workshops and community dialogues (2018-2019), a first version of the coherence plan (reports by themes and communication mapping) was presented and validated by the Steering Committee at the end of 2020. Thus, the intentions of the Loire au Coeur project were broken down into different themes: landscape, public spaces, mobility, economic attractiveness, heritage, uses. A communication medium was produced in 2021 for distribution, after validation by the elected officials, at the next public meeting (March 2022);
- **quai de la Fosse:** preliminary studies of the public spaces, accompanying the DNL (New Tram Lines) project, between the future Memorial tram station and the CCI, were finalized in the fall of 2021. These studies are integrated into the AVP DNL piloted by SEMITAN;
- **Anne de Bretagne bridge:** support in the definition and programmatic intentions of the Anne de Bretagne bridge competition (2021-2022 / project conducted by the Public Spaces Department). The winner will be announced at the beginning of the 2022 school year;
- **Canal Saint-Félix:** the preliminary studies on the Favre and Malakoff quays, around the canal, were suspended at the end of 2020. In an effort to encourage new uses and looking ahead to the first guidelines provided by the studies, a process of transitional arrangements and activities around the Saint-Félix canal (quai Favre) was initiated during the summer. This approach should be extended in 2022;
- **Cité des Congrès:** studies are suspended on this perimeter concerning the extension project;
- **Gloriette Petite-Hollande:** Following the approval of the programme and the financial envelope of the AVP Gloriette Petite-Hollande at the October 2019 Metropolitan Council meeting, the preliminary design studies were presented and partially validated in 2021. On this perimeter of nearly 12 hectares, additional studies were requested concerning Daviais Square and the square in front of the Media Library, while shaded areas have been introduced on the esplanade;

- **Hôtel Dieu perimeter:** the specifications for launching technical studies on the Hôtel Dieu block were finalized. Studies will begin in early 2022.

Other major urban core area projects

The new Nantes train station

- On the north side, after the opening to the public in November 2020 of the new mezzanine and the renovated north and south passenger buildings, the station's construction site gave way to the creation of the "Cyclo Station" to safely accommodate bicycles and Bicloo+: delivered in September 2021. It completes the redevelopment of public spaces.
- On the south side, the redevelopment of public spaces, which began in September 2020 with the top of the Malakoff platform in front of the hotel, was gradually extended to the entire station concourse. In order to continuously maintain access to the station for all modes of transport, this vast operation is being carried out in successive phases. In July, it was necessary to move the short-term parking to the south of the Saint-Félix slipway in order to temporarily transfer the taxi rank and bicycle parking to the north of the slipway, opposite the train station. The first completed section, in front of the hotel, was delivered in September 2021. The second part, in front of the station, will be delivered in September 2022.
- At the same time, to the east of the station, demolition of former SNCF buildings continued through to July 2021 to make way for the future multimodal exchange hub (to be built from 2022 to 2025) and the extension of Boulevard de Berlin to directly link the station to the new Pré Gauchet neighbourhood. In this eastern sector, the first part of the future bus station was completed in September. The earthworks on Berlin Boulevard have begun. They will be carried out in two stages: a functional development in its central part to create the pedestrian link, the exclusive right-of-way which will accommodate the C5 and C3 chronobus lines and the 54 bus line from September 2022; then in 2025, the final development up to the foot of the façades when the surrounding buildings will have been built.
- Finally, the architectural project for the future building housing the multimodal exchange hub (PEM) was chosen in July 2021. The design studies are progressing at a steady pace in order to launch the construction in 2022.

Pré Gauchet / EuroNantes - Station Comprehensive Development Zone

The Pré Gauchet Comprehensive Development Zone has been awarded to Nantes Métropole Aménagement, accompanied by a project management team led by Gérard Pénot (Atelier Ruelle). The project continued to progress at a steady pace in 2021 with the last jobsites of phase 3 and preparations for phase 4:

- construction of the 3D block (6,000 m² of business premises) and the 4B block (5,000 m² of housing and 16,000 m² of business premises with in particular the establishment of UCPA) and the preparation of the construction site of the 8F block (61 housing units);
- the design of the Saupin West block project (Nordic pool and 6,000 m² of housing and activities with a strong presence of wood);
- the choice of the project for the ABC block of the multimodal exchange hub (bus station, taxi rank, bicycle parking, car park and rental services and 11,000 m² of business premises), and the implementation of a detailed design;
- the choice of an operator and the launch of the design consultation for block 8D8E (a 5,000 m² hotel, the station's short-term public parking lot, 7,000 m² of housing and 4,000 m² of activities).

Bas-Chantenay

Created on 28 June 2019, the Bas-Chantenay Comprehensive Development Zone is managed by Nantes Métropole Aménagement. It covers only 104 ha out of the 152 ha of the development concession. The programme of the Comprehensive Development Zone includes 90,000 m² of business premises, a

volume of 1,000 housing units and 10,000 m² of public facilities. The urban project management is entrusted to a consortium headed by the RRA agency, with Bernard Reichen as architect and town planner and the Phytolab urban development agency.

The studies and works for the year 2021 are as follows:

- **Carrière sector:** continuation of the studies for the development of public spaces, and for the transformation of the CAP 44 building into the Cité des Imaginaires;
- **Dubigeon sector:** Continuation of urban studies on the sector and studies for the restoration of the black crane landing stage, which will begin in the fall of 2022;
- **electric plant sector:** delivery of the “Business centre around the maritime, nautical and river sector” building and partial completion of the public space works in the sector. Nantes Métropole Aménagement is the project manager for this 6,000 m² building of offices and prototyping workshops; 60% of its surfaces are already occupied.
- **Bois-Hardy sector:** resumption at the end of May 2021 of a second phase of consultation for the future of this inhabited hillside, with a cycle of workshops throughout 2021 that allowed for the co-construction of a neighbourhood project largely endowed with green spaces that can be appropriated by the residents .
- **all sectors:** 2021 was also a year of continuing preparatory land negotiations, of supporting industrial transfers while maintaining the production vocation, of supporting transfers for offices or housing. A global environmental strategy approach was implemented, involving all Nantes Métropole departments. The issues of mobility, soil renaturation, adaptation to climate change, conservation of the ordinary heritage, and the footprint of processing activities are all themes that have prevailed in the approach (the involvement of all stakeholders will take place during a second phase in 2022).

Pirmil-les-Isles

Created in June 2018, the Pirmil-les-Isles Comprehensive Development Zone (ZAC) is managed by Nantes Métropole Aménagement, supported by a project management team led by Frédéric Bonnet (OBRAS). This operation will be one of the proving grounds for the ecological transition in the metropolitan area, by developing new city-making methods and procedures on a large scale: greater concern devoted to water and biodiversity, the extensive use of climate-regulating trees, energy-efficient and low-carbon planning and construction by working from the design phase with the circular economy and alternative materials to concrete.

The development objectives include the enhancement of the landscape qualities of this site on the banks of the Loire, the enhancement of the green belt based on the presence of water, the safeguarding of the existing residential fabric and vibrant business zones with a high concentration of jobs.

The ambition is to propose new districts to live, work and visit in contact with the river and the urban core area. In practical terms, this will involve providing a good level of urban services that are all designed in keeping with the concept of the “suburb”, combining a mix of functions and a diversity of architectural and urban forms. Ensuring that the new neighbourhoods are served by structural travel networks will be key to the project’s success: the tram is already present in Nantes (Pirmil) and planned in Rezé (Basse Île).

The two operational zones are Pirmil in Nantes and Basse Île in Rezé. The plans submitted as part of the schedule of work approved by the Metropolitan Council on 13 December 2019 include:

- approximately 240,000 m² of public spaces redeveloped or created, including the Confluence park in Pirmil and the creation of a Riverside park in Basse Île (4.2 ha of green spaces in Rezé and approximately 1.8 ha of green spaces in Nantes);
- 1,000 housing units created in Nantes “Pirmil” and 2,300 units in Rezé “Basse Île”, of which 30% are social rental units and 25% are affordable housing;
- approximately 92,000 m² of floor space for businesses, offices and shops;
- approximately 8,000 m² of floor space for local public facilities in Rezé, including a school complex and sports, community and social facilities for young children;

- a location identified for a potential supra-municipal public facility.

2021 saw the completion of the sourcing work and association of the development and construction sectors in order to encourage innovative processes in the consideration of environmental, social and economic issues. It was also possible to complete the collaborative workshops that had been suspended by the health crisis.

The global preliminary project, now well advanced, confirmed the promises of the environmental and landscape bias, as well as the programme's major balances. It was coordinated with the design studies for the tramway.

An innovative consultation on the uses of the city of tomorrow was launched at the public meeting on 7 September 2021: The lessons will be learned in 2022 before launching the consultations for phase 1 of the ZAC, centred on the Rezé sector of Basse-Île.

Finally, Nantes Métropole announced the launch of studies for the creation of a metropolitan Olympic swimming pool (on the site identified for a supra-municipal facility).

CITY POLICY PROJECTS

City policy for neighbourhood urban renewal projects are structured around four cross-cutting issues:

- social cohesion;
- economic development and employment;
- urban renewal and quality of life;
- transitions.

Each time, particular attention is paid to the provisions for dialogue with the inhabitants.

All of these dimensions are consolidated within a global project that aims to transform the neighbourhood in order to improve the living conditions of the inhabitants. The aim is to consider the diversity of time scales (from the short to the long term) and to link up the intervention of the communities, landlords and associations, in conjunction with the initiatives of the inhabitants.

Four projects supported by the National Agency for Urban Renewal (ANRU)

Grand Bellevue

Implemented in the municipalities of Nantes and Saint-Herblain, the Grand Bellevue project aims to provide a response to the various challenges related to urban planning, the economy, social cohesion, quality of life and transitions in order to make this a sustainable, active and popular neighbourhood.

Highlights in 2021 included:

- the approval of the ZAC realisation file, as well as the studies for the Mendès-France, Bois Hardy, Moulin Lambert and Moulin des Hiorts sectors;
- the ongoing effort to rehouse families living in buildings slated for demolition in the sectors of La Bernardière in Saint-Herblain and Lauriers-Bois Hardy and Moulins in Nantes;
- furthering of the studies for the layout of a new sports complex (landscaping and water aspects);
- the development of the square in front of the Ernest-Renan secondary school in Saint-Herblain;
- in the Mendès-France sector: the continuation of the rehabilitation operation by CDC Habitat Social with the delivery of a first complex (Toulouse) and the development of an inter-communal day-care centre on the ground floor; the reconfiguration of the Place Mendès-France with the continuation of discussions with the merchants concerned by the demolition with a view to their relocation or departure; the initiation of actions for the transitional management of the Place Mendès-France: coordinated action against the proliferation of rats, embellishment of iron curtains by the mobilisation of an inter-communal youth cooperative, installation of artists' studios in the old shops; the completion of a documentary on Memories of the Place Mendès-France, by Café Prod;
- in the Lauriers - Bois Hardy sector: the demolition of the Saône line (Nantes Métropole Habitat); the delivery of the Michelle Palas square, around the Maison des Habitants et du Citoyen de Bellevue, which gave rise to a festive inauguration in September; the completion of work on the multi-professional health centre and the public support spaces; the start of rehabilitation and extension work on the Alain Fournier school group;
- At the same time, as part of the ANRU+ "Bellevue en transitions" initiative, the year was devoted to the implementation of projects carried out by associations: small urban farm, organic waste recycling platform, Bellevue alternative market, Plan B third-party transition site.

Finally, the actions undertaken as part of the Grand Bellevue Educational City mobilising educational and associative actors, parents and institutions were deployed: workshops on artistic and cultural

practices, actions to support parenthood, distribution of materials, work on health and well-being.

Bottière-Pin Sec

Nantes Métropole intends to continue transforming the urban, social and economic fabric of the Bottière-Pin Sec priority neighbourhood. The objectives are to make the neighbourhood a pleasant place to live that is attractive and accessible to all; to diversify the housing stock to meet each household's needs; to develop economic activity and boost employment.

During 2021, many projects continued, including in the heart of the neighbourhood: opening of the relocated Centrakor store in November, demolition of the old store, preparation of the Cif project (80 housing units for sale and business units on the ground floor), start of the servicing and network diversion work, definition of the provisional installation project for the Magasin du Réemploi, discussions with the Beau-Tiers Lieu collective to define the project.

In terms of housing, the rehousing operations for the Basinerie-Becquerel-Souillarderie and 76 rue de la Bottière complexes were almost completed in 2021, and the programming study and the constitution of the group of inhabitants for the Riveterie participatory housing operation were initiated. Finally, the operations for housing accompanied self-rehabilitation, piloted by the Compagnons Bâisseurs in the Pin Sec sector, continued.

With regard to consultation, workshops were held prior to the development of Champollion Street, workshops and an exploratory walk were organised in connection with the development of a "games and gardens" guide plan. Finally, new global project days were held in June.

Extension and rehabilitation work on the Urbain Le Verrier school continued with the construction of the new school canteen, the extension and restructuring of the kindergarten and elementary school and the renovation of the school yards. The development of Champollion Street and part of Valenciennes Street was also initiated.

North Nantes

Launched in 2016, the overall Nantes-Nord project was pre-planned through an integrated approach that combines actions on quality of living, economic development, employment and community life. Alongside this overarching requirement for social cohesion, there is a general aim for dialogue at all levels.

The creation file of the Nantes-North ZAC was adopted in October 2021; In this context, the deepening of the studies carried out by the Germe et Jam group made it possible to refine the consideration of the presence of water and the tree heritage, constituting a real backbone linking the natural spaces of the neighbourhood.

As for the multi-professional health centre, following the work on the public spaces that began in the first half of the year, the construction site was started in September. Negotiations with shopkeepers for the demolition of the Boissière shopping centre continued.

A new edition of the "Springtime of the Global Project" was organised in May 2021. It resulted in a public meeting in October. During this period, a participatory process was initiated on the future urban core area of the Chêne des Anglais, so as to identify the sector's assets and constraints, as well as the expectations relative to the functioning of a neighbourhood centre.

The rehousing of the residents of 8 Samuel de Champlain Street continued, while the rehousing of the residents of the Vancouver site was initiated in June. In the Chêne des Anglais sector, the 200 housing units (2 and 4 rue Samuel de Champlain renovated by Vilogja) have been delivered since July 2021. Finally, the 198 units at 3 and 5 rue de Québec in the Bout des Pavés sector were delivered in September.

Dervallières:

The Dervallières neighbourhood is continuing its transformation on the basis of a master plan that is structured around the following objectives: getting around and finding one's way in the neighbourhood, gathering and occupying open spaces, diversifying and improving the quality of the housing and services offered.

In 2021, the master plan for the redevelopment of the Place des Dervallières was established: The objective is to create views towards the park, to re-address the Asseray pole on the square and to

reposition the shops in a continuous line, to create pedestrian, planted and animated public spaces conducive to the organisation of events aiming at a wide appropriation of the inhabitants.

In parallel, the “metamorphosis” approach to accompanying the transformation of the square is being implemented with the inhabitants in order to prefigure the new spaces, test new functions and accompany the construction site:

- an operator, Maison Familiale de Loire-Atlantique, a subsidiary of Atlantique Habitations, was appointed for the construction of the central block, that will house shops on the ground floor and housing units, and a second block housing associative activities on the ground floor and housing units on the upper floors;
- the offer of local services, within the Daniel Asseray centre, was redefined for implementation in 2022;
- Work to relocate households in the Lorrain sector of the Tower continued in anticipation of the combined renovation and demolition project planned for 2022, piloted by Nantes Métropole Habitat;
- Work on the public spaces around the Grand Watteau building, including the creation of a playground for 2-10 year olds, began for delivery in spring 2022;
- Finally, the urban farm project in the Parc des Dervallières was selected by the ANRU as part of the “Quartiers fertiles” call for projects.

Three other urban renewal projects

Château in Rezé

With the urban renewal project, the objective is to make Château a pleasant and attractive residential and sustainable neighbourhood that is part of the ecological transition, a welcoming and supportive neighbourhood, one that is open to all and for all.

Studies continued, including a “Gender” study on public space, an economic programming study, and the continuation of the public safety and security study. A public meeting was organised in June, in order to present the main characteristics and evolutions of the project (consultation phase), which resulted in the formalization of a citizen’s opinion at the end of the year. In parallel, the rehabilitation of the Pontchâteau building by Atlantique Habitations was continued.

Plaisance neighbourhood in Orvault

The overall project for the Plaisance neighbourhood revolves around the following objectives: improving the living environment of the inhabitants, the quality and range of the housing stock available to ensure greater social diversity, renovating public spaces and increasing the supply of public facilities and shops.

2021 was marked by the adoption of the metropolitan interest for the Plaisance project and the definition of a development concession entrusted to Nantes Métropole Aménagement. A response to the citizen’s opinion was shared with residents in July. The rehabilitation programme was adjusted with Atlantique Habitations. During the summer, an adventure playground set up by the Centres d’Entraînement aux Méthodes d’Éducation Active (CEMEA) made it possible to take over the right-of-way of the Trieux.

Breil neighbourhood in Nantes

The urban study undertaken on the heart of the neighbourhood (within the urban mesh made up of Rue du Breil, Rue Feyder, Rue des Primevères and Boulevard Pierre de Coubertin) was continued, based in particular on the citizen dialogue booklet produced in 2020. Among the issues identified as guiding axes for the project:

- continue support the for the life of associations;

- invest and transform the Jules Noël square;
- initiate a reflection on the future of the Saint-Luc church with the stakeholders and the inhabitants;
- strengthen the healthcare offer for the neighbourhood;
- accommodate a day-care centre and a departmental solidarity space within the neighbourhood;
- revitalize the shopping mall.

On these bases, a time of exchange with the inhabitants was organised on the public space at the beginning of July.

During the summer, a first step was taken on the Place Jules Noël, with the activation of the “grey square”, invested by the GRU architecture collective in collaboration with the neighbourhood actors. Also of note was the organisation of a festive time “Miami Breil”.

In the fall, the “Testing my store” programme was launched for three vacant cells as part of the shopping centre’s revitalization process.

BUILDING ACCOMMODATION FOR ALL

With 656,275 inhabitants (2018), Nantes Métropole confirms its position as the French city with the sixth-highest population growth rate. In order to house its new inhabitants, Nantes Métropole is implementing a proactive policy which originates from the Local Housing Programme (PLH).

The Metropolitan settlement policy

To facilitate access to social housing stock and make it easier for tenants to move house, in 2013 Nantes Métropole established an Intermunicipal housing conference (CIL) which brings together the 24 municipalities, the social landlords, the French State and “Action Logement”, a major stakeholder in social housing in France. In 2016, the conference was expanded to include associations operating in housing.

For the record, on 17 October 2016, the Metropolitan Council approved the strategic priorities issued by the metropolitan CIL. This document is structured around the following three issues: streamlining households’ “residential paths”; establishing a balance in the local area; ensuring fair treatment for all households and equal opportunity in access to the social rental housing stock. The guidelines are set out in two documents (approved by the CIL) that define the objectives, the partners’ commitments and the work programme for 2017-2022:

- the “inter-municipal allocation agreement”: merger of the inter-municipal collective agreement (ACI), the territorial balance agreement (CET) and the metropolitan rehousing charter, approved by the Metropolitan Council on 10 February 2017 after a favourable opinion from the committee responsible for the local action plan for the accommodation and housing of disadvantaged persons (PLALHPD) and the prefect;
- the “partnership plan for managing the demand for social housing and applicants’ requests for information” (PPGDLSID), approved by the Metropolitan Council on 26 June 2017 following an opinion by the municipalities and the Prefect.

The Equality and Citizenship Act of 27 January 2017 provided further details about the definition of the housing allocation policies implemented by the inter-municipal housing conferences (CIL). Although the documents that make up the Nantes Métropole CIL are in keeping with the spirit of the Equality and Citizenship Act, certain details have been added, mainly in relation to the objectives of restoring balance in social occupancy.

In addition, following joint work within the Nantes Métropole CIL, the framework documents (strategic priorities and the inter-municipal allocation agreement (CIA)) were also amended (giving priority to the action sheets), then presented and confirmed in January 2018. They were approved by the Metropolitan Council in December 2018. The Partnership Plan, which requires a prior opinion from the municipalities and the State, was approved in 2019.

As of 31 December 2021, 35,833 households had applied for social housing in the metropolis, for 5,930 allocations made in 2021.

The CIL’s work programme is long-term in order to address the identified issues. Thus, in 2021, the work groups continued with the aim of:

- diagnoses and definitions of allocation strategies in the city’s priority neighbourhoods (QPV) concerned by urban renewal operations. The approach was finalized for the Plaisance in Orvault, Château in Rezé, and Bottière Pin Sec in Nantes neighbourhoods. It must be confirmed by the State and Action Logement.
- the active rental experiment (extended by one year due to the health crisis in 2020);
- monitoring of allocations to priority households;
- post-rehabilitation rent trends: The aim of this approach is to define a maximum level of rent in rehabilitated housing in order to guarantee their accessibility to tenants of the social housing stock.

In November 2019, the Elan Law resulted in changes to the social housing management and allocation practices. This involves the rating of social housing demand and the management of flows, whose implementation was supposed to be made operational by the end of 2021 (but finally postponed to the end of 2023). In this regard, a new working group dedicated to the rating of social housing demand met in 2021 based on the approval of the full CIL in December 2020. It was divided into two groups, one technical, the other political, as part of an iterative process that led to the creation of an initial rating grid validated by the plenary CIL in January 2022.

The achievements in 2020-2021 were reviewed at the CIL plenary session on 25 January 2022, validating the work programme for the year 2022. The latter provides for the continuation of the working groups currently underway on priority groups, settlement strategies in priority neighbourhoods, the development and extension of active rental to all priority neighbourhoods, and the continuation of work on the rating of social housing demand, including the testing of the grid and the preparation of communication around the rating. The programme includes the creation of a new working group dedicated to flow management.

Strategic priorities of the Local Housing Programme (PLH) for 2019-2025

Following the Metropolitan Council meeting of December 2016, the years 2017 and 2018 were devoted to drawing up the draft PLH for 2019-2025: diagnosis and stakes, and strategic priorities. More specifically, these two phases involved:

- statistical analyses of socio-demographic trends in Nantes Métropole's housing stock and in the housing markets, in collaboration with the urban planning agency AURAN;
- studies into specific points (housing for more disadvantaged residents, housing for people with disabilities);
- meetings with housing partners over a series of 10 round tables;
- meetings with the municipalities of the metropolitan area.

The new PLH was finalised in a Metropolitan Council meeting of June 2018, after favourable opinions from the 24 municipalities and the French Government. It was then definitively approved by the Metropolitan Council in December 2018.

This third PLH raises the target figures set down in the housing policy and strives to meet the metropolitan area's new challenges with higher-quality solutions, suited to the diversity of residents' current and future needs. To this end:

- in the existing housing stock, the emphasis was placed on providing more energy-efficient homes (5,000 homes are renovated per year) that are also better suited to the households' expectations, particularly by adapting homes in both the private and the social housing stock to population ageing and disability;
- new-build housing stock must address the unmet needs. The programme sets an annual housing production target of at least 6,000 new units per year;
- the PLH reasserts the intention to diversify the offering of new homes to cater for residents' residential paths. This will mean upholding the PLH's annual quality targets (2,000 social housing units, 500 subsidised-rent homes, 700-800 homes for sale at subsidised prices) and the creation of new "housing products" to fill out the range of offerings and streamline residential paths: social housing for subsidised rental and sale at "intermediate" prices (250 per year);
- in order to meet the housing needs of elderly and disabled people, a range of solutions are needed, from adaptation of the existing housing stock to the production of suitable dispersed or grouped housing units;
- the first priority of the local area's housing policy must be to meet the needs of the most vulnerable households. Give priority to households whose most urgent need is housing.

Sustained production has exceeded the targets of the Local Housing Programme

The PLH set out targets for the construction of 4,500-5,000 homes per year over the 2010-2016 period. These targets were exceeded: the average construction from 2010 to 2015 was 7,500 units authorised per year. The amended PLH, approved for the 2014-2018 period, had set a target of 5,500 to 6,000 new homes per year, which represents a moderate, steady rate of production. NB: between 2014 and 2018, permission was given for an average of 7,300 new homes per year.

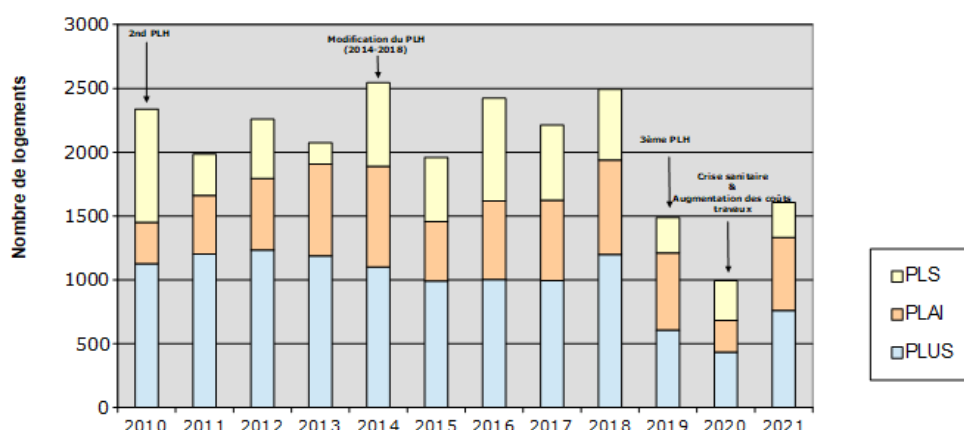
The new PLH confirms a target of 6,000 new homes per year for the period 2019-2025. Since 2019, the metropolitan area has been marked by a downturn in the production of new housing, with permission given for 6,610 homes in 2019, 4,100 in 2020, and 4,800 in 2021.

A strong and sustained supply of social rental housing

In 2021, 1,333 social housing units for rental were financed under the PLUS (social housing loan) and PLA I (subsidised rental housing loan for integration) schemes, including the PLUS and PLA-I ANRU schemes. This represents a financial volume of €11.526 million in direct aid for Nantes Métropole (including €3.763 million for accessible housing).

In all, an average of 1,547 social housing units for rental have been funded per year since 2010 (of a targeted 1,800 to 2,000 homes per year).

Programmation de logements sociaux et locatifs abordables de 2010 à 2021



Source: Housing Department

Affordable accommodation for all

Low-income rented social housing loans (PLS)

This type of loan is used to build dedicated accommodation for students, elderly people and disabled people as well as family homes.

273 PLS homes were funded in 2021 (of which 48% were dedicated housing units and 52% were family homes).

Since 2010, the annual average number of approved PLS rental housing units is 484 homes, compared with an initial target of 500.

PROGRAMMATION 2021 total									
Vocations	PLUS	PLAI	PLUS ANRU	PLAI ANRU	PLS	TOTAL	%	PSLA	OFS
Logement familial	618	289	46	74	133	1160	72 %	123	96
Logement familial - personnes âgées	64	24	0	0	8	96	6 %	0	0
Logement familial - insertion	0	22	0	0	0	22	1 %	0	0
Logement familial - ASV /pers. Hand	2	11	0	0	0	13	1 %	0	0
Logement familial - jeunes - de 30 ans - ELAN	0	0	0	0	0	0	0 %	0	0
EHPAD / résidence autonomie / résidence services	30	0	0	0	29	59	4 %	0	0
Foyer pour personnes handicapées	0	0	0	0	29	29	2 %	0	0
FJT / Jeunes salariés / Apprentis	0	50	0	0	0	50	3 %	0	0
Résidence étudiante	0	0	0	0	74	74	5 %	0	0
Structure d'accueil (maison relais...), d'insertion, GDV	0	103	0	0	0	103	6 %	0	0
TOTAL	714	499	46	74	273	1606	100 %	123	96

1333

Source : DH - Parc Social

Affordable home ownership

This system allows medium-income households (based on PSLA income thresholds) to find housing within their budget in the Nantes Métropole area: approximately €2,800 to €3,000/m² of living space in BRS and €3,000 to €3,200/m² in PSLA, while free-market prices are in excess of €5,000/m². The PLH sets a target of 800 housing units per year.

Since 2010, an average of 459 affordable housing units have been authorised for construction every year. The affordable housing units planned under the current Comprehensive Development Zone make up the bulk of production of units for affordable homeownership.

These housing units are produced by social actors (social and cooperative backers) thanks to the PSLA loan and reduced VAT in the City's priority neighbourhoods and within a 300-metre surrounding perimeter.

In addition, the Loire-Atlantique land ownership organisation (OFS), "Atlantique Accession Solidaire", supported by the department, CARENE, Nantes Métropole and 14 social housing associations and low-rent housing cooperatives, was set up to develop a new, more attractive and sustainable range of affordable housing (with separation of land and buildings).

In 2021, 219 affordable housing units were approved: 96 OFS housing units and 123 PSLA housing units. Added to that are social landlords' sales of homes from their housing stock: 221 units sold in 2021 at affordable prices, primarily to social housing occupants or tenants (75% of sales).

Meeting specific housing needs

A proportion of the rented social housing and affordable housing financed in 2021 addresses specific needs:

Housing for students/young professionals

- 50 housing units in the Foyer Jeunes Travailleurs (FJT) in La Chapelle-sur-Erdre with the Édité de Nantes association.
- A 74-unit student residence in La Joliverie in Saint-Sébastien-sur-Loire.

Housing for the elderly

- 18 social housing units for the elderly in Bouaye.
- 16 social housing units for the elderly in Les Sorinières.
- 59 units in an independent residence on the Ile de Nantes (PLUS and PLS) in an operation carried out by the Red Cross.
- 20 social housing units for the elderly in Nantes.
- 26 social housing units for the elderly in Sainte-Luce-sur-Loire.
- 8 social housing units for the elderly in Saint-Herblain.
- 6 social housing units for the elderly in Saint-Sébastien-sur-Loire.

- 2 social housing units for the elderly in Vertou.

Housing and accommodation for households with persons with disabilities

- 3 social housing units for disabled people in La Chapelle-sur-Erdre.
- 7 social housing units for disabled people in Les Sorinières.
- 3 social housing units for disabled people in Nantes.
- 29 PLS units in a home for disabled people in Orvault.

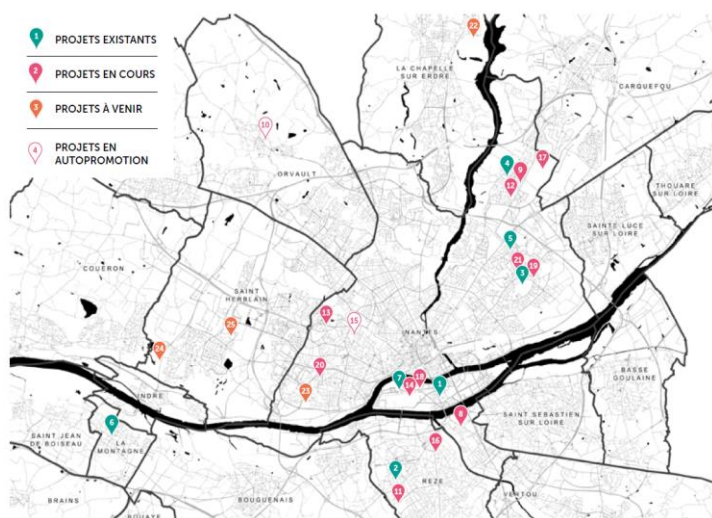
Housing and accommodation for disadvantaged households

- 4 social housing units financed for disadvantaged households in Bouaye.
- 8 social housing units financed for disadvantaged households in the residence project led by the Red Cross on the Ile de Nantes.
- 25 social housing units financed as part of a new social residence in the ZAC Mellinet in Nantes.
- 4 social housing units financed for disadvantaged households in Nantes.
- 3 social housing units financed for disadvantaged households managed by Adapei in Les Sorinières.
- 29 social housing units in a reception structure managed by Habitat et Humanisme in Nantes.
- 3 social housing units financed for disadvantaged households in Vertou.
- 25 social housing units in a reception structure managed by the Saint-Benoît Labre Association in Vertou.
- 24 social housing units in a boarding house / reception structure managed by the Petits Frères des Pauvres in Vertou.
- In addition to this programming, Metropolitan or State assets are being made available to the public in need or without housing solutions: house for women victims of violence in the rue de la Béraudière, house on the road to Clisson in Saint-Sébastien-sur-Loire for a homeless household (Chez Soi d'Abord), house in Orvault for migrants from Eastern Europe...

The Metropolitan Participative Housing Initiative

The Metropolitan Participative Housing Initiative was launched in early 2016. Around 20 sites have been identified. Its aim is to develop a new way of living in housing by involving future occupants in the process, from the design of the programme to its commissioning and eventual management of the premises and communal areas.

An initial programme resulting from the initiative was delivered in 2020, with two more at the start of 2021. A total of 6 projects are currently under construction: 4 have a building permit under consideration, 4 are in the pre-operational stages, 3 of which involve groups of residents.



3 programmes delivered
 4 projects under construction
 4 building permits under consideration
 3 projects in the pre-operational phase
 1 programme in the launch phase
 4 upcoming projects

Source: Housing Department

Upgrading the existing private and social housing stock

Since 2010, education and awareness-raising initiatives have been conducted to meet the challenges of improving the energy efficiency of existing buildings and halving greenhouse gas emissions by 2030. Nantes Métropole has accordingly developed an initiative to help co-owners living in residential blocks undertake energy-efficiency renovations. The initiative relies on a team of energy transition policy officers who develop a project methodology for co-owners' associations and help the co-owners to identify the financing options available to them.

Moreover, Nantes Métropole is managing the two initiated General Interest Programmes (PIG) in an effort to adapt housing units, to address specific issues or combat insalubrity and fuel poverty and ensure that rent for private housing remains affordable.

Following the adoption of the energy transition roadmap, 2018 saw the launch of a new comprehensive system of financial assistance, "Mon Projet Renov", with an allocated budget of €56 million for the 2018-2025 period.

In application of the renovation objectives from the energy transition roadmap (included in the Local Housing Programme (PLH)), the year 2021 was marked by:

- the operational start of the two PIGs (General Interest Programmes):
 - Mon Projet Renov "households" General Interest Programme**, the follow-up animation of which was entrusted to SOLIHA with the aim of renovating 3,400 homes over a period of 5 years on various components: fight against fuel poverty, fight against substandard housing and home maintenance;
 - "Residential block" Mon Projet Renov General Interest Programme**, which Citémétrie is responsible for coordinating. Intended for co-owners wishing to take part in an ambitious energy renovation project, the aim is to intensify the mobilisation of small residential blocks (particularly those managed on a voluntary basis) by supporting the management agents in the financial engineering of work projects and by strengthening the social support of ANAH households (landlords and occupants). The objective is the energy-efficient renovation of at least 750 housing units in residential blocks per year, i.e. 3,750 housing units over 5 years, and to support 100 to 150 residential blocks.

- Continuation of the pre-operational study on implementing a system to deal with struggling residential blocks for “Les Rochelets” in Nantes.
- the improvement of the existing social housing stock, to support the new objectives of the Local Urban Planning Programme (PLH). A grant for the energy-efficient renovation of social housing stock was introduced in July 2019 for the years 2019, 2020 and 2021:
 - in 2019, 4 energy renovation projects received subsidies in Orvault, Rezé and Nantes, for 328 housing units;
 - in 2020, 7 operations were financed for a volume of 770 housing units in Nantes, Vertou and Saint-Herblain.
 - in 2021, 3 operations were financed for a volume of 295 housing units in Rezé and Orvault.

Key figures in 2021

- 8 neighbourhoods involved in the “active rental” trial.
- 1,333 housing units financed through PLUS (social housing) and PLA-I (assisted rental) loans.
- 273 housing units financed through PLS low-interest loans.
- 123 housing units financed through PSLA social lease-ownership loans.
- 96 housing units under a “Bail Réel Solidaire” ground lease via the “Atlantique Accession Solidaire” land ownership organisation were approved (initial programmes of the solidarity-based real estate organisation “Atlantique Accession Solidaire”).
- 550 housing units benefited from grants for the improvement of private housing.

HOUSING-RELATED SOCIAL SUPPORT

Nantes Métropole is active in providing housing-related social support and committed in the field of prevention of energy poverty. Through the Housing Solidarity Fund (FSL), the local response service for energy management (SLIME) and the “Housing First” plan, it provides individual assistance to tenant households in social or private housing who are facing difficulties in accessing or staying in housing. This also involves providing support to people facing situations of energy insecurity.

The Housing Solidarity Fund (FSL): essential tool to help people stay in housing

This tool of the local housing programme (PLH), which forms part of the “energy transition” roadmap, aims to:

- prevent and address the circumstances of people who are unable to access and stay in housing due to financial difficulties;
- support the most vulnerable households in terms of energy needs and prevent problematic situations;
- become a major tool for solidarity encompassing the residents of all 24 municipalities of the metropolitan area.

The Local response service for energy management (SLIME): a tool supplementing the FSL in order to identify situations of energy poverty

It aims to strengthen the fight against energy poverty by offering free social and technical diagnostic visits to the homes (“outreach”) of the most vulnerable metropolitan households with energy-related problems. As a complement to financial assistance, the Slime provides a better understanding of the energy challenges facing the housing stock in the region.

The Housing Solidarity Fund (FSL) in 2021 represents:

- more than 8,900 requests processed in 2021 (all aids combined), representing an increase of 27% compared to 2020;
- more than 7,300 requests granted in 2021, representing an increase of 25% compared to 2020;
- 5,580 households were assisted for a total of €2.166 million;
- average aid of €388;
- exceptional Covid “phase 2” aid that continued until November 2021 for an amount of €451,000: 476 Metropolitan households benefited for an average amount received of €948. Most of the assisted households had never sought help from the FSL. They suffered a loss or decline of income due to the health crisis.
- a partnership work, co-constructed with the actors and operators of social support, to “renovate” the legal and contractual framework of social support measures. The aim is to better meet the needs of vulnerable people by adapting support to their social situations and to support more households.

Key figures of the SLIME in 2021:

- 442 visits carried out;
- An average of 40 home visits made each month;
- €32,000 of small equipment distributed;

- a majority of tenants in the social housing stock (76.5%);
- a majority of single people and adults with children;
- the opening of a one-stop shop on 4 October 2021 to allow:
 - centralisation of all requests for Energy-SLIME home visits;
 - a more fluid management of requests and a better distribution of socio-technical appraisal visits between operators;
 - greater responsiveness to residents;
 - guidance and advice to households and partners on Energy-SLIME home visits.

“Housing First”

The “plan for housing first and the fight against homelessness” is a national public policy to which Nantes Métropole has been committed since 2018 by signing an agreement to fast-track implementation.

In 2021, the action plan continued to promote access to housing for the target groups. The “housing first” platform provided for the examination of complex individual situations with partnership work between the agents of the FSL agents and of the SIAO. In this context, a shared analysis tool is used to gain a better understanding of the situations and accompany the efforts of homeless and vulnerable people with regard to housing in the local area. A multidisciplinary commission met (8 times) to define a housing orientation for households with complex situations.

Finally, a new metropolitan mechanism was put in place to support communal shelter operations: dedicated metropolitan fund, validation of internal regulations and support for the first 4 projects presented in the municipalities of Bouguenais, Rezé and Nantes. These are diverse projects to meet the specific needs of various audiences. The common denominator is the need for accommodation or shelter with the experimentation of new concrete solutions to be deployed (notably co-financing with the State).

ACCOMMODATING ROMA COMMUNITIES

For many years, Nantes Métropole has been working to improve accommodation provisions for Roma communities. Up until 31 December 2016, its efforts relied on an inter-municipal cooperation scheme (Syndicat mixte).

The legal obligations of accommodation are included within the framework of the 2018 departmental plan that was renewed at the end of that year for the 2018-2024 period. The document also sets out the guidelines for housing of Roma communities who have settled in the local area and in helping them to claim their rights.

Improving the range of accommodation options with the creation of new sites

The Nantes Métropole territory had 18 permanent sites with a total capacity of 228 locations.

As regards the stopping place requirements identified in the departmental plan for accommodation of Roma communities, four sites remain to be built, providing an additional 27 locations.

Accommodating summer peaks

In summer, large groups of travellers (50 to 200 caravans) travel together to attend family or religious events. The State manages the area's accommodation facilities by coordinating and authorising the arrival of these large groups.

Nantes Métropole contributes to this effort by providing a leased developed site on the Grand Port Maritime estate. It also manages access, waste collection and the mediation necessary to welcome the various groups.

Developing housing for settled Roma communities

Under its Local Housing Programme (PLH), Nantes Métropole is pursuing its commitment to developing suitable housing, more specifically for families identified in the departmental plan for housing Roma people. As part of this commitment, Nantes Métropole launched an initiative in 2011 to find out more about the settlement locations and situations in the local area, and develop housing solutions that cater to the families' needs.

Encouraging access to rights and citizenship

Achievements in 2021 include:

- the launch of the project to collect testimonials in East Nantes, a participatory and memorial initiative in this area;
- continuation for the 6th year of the partnership between the group of metal recovery operators from the Roma communities and the Rezé waste collection centre;
- social mediation initiatives are continuing on the City of Nantes' family plots and on the caravan sites of the conurbation (regular visits, individual support) including the Aparthé / friendly café initiative. A particular benefit of mediation is that it fosters social bonding and helps travelling communities to exercise their rights. Particular attention was paid to the economic situation of families and children's schooling.

Changing public perceptions of the Roma community

The SRI and ADGVC associations, which receive operational support from Nantes Métropole, are continuing their support initiatives. In particular, these associations work in connection with the "Tissé Métisse" event (a festival held each year at the Cité des Congrès) by coordinating a group dedicated to tackling prejudices against Roma communities.

DETERMINED, CONCERTED ACTION FOR UNIVERSAL ACCESSIBILITY

Nantes Métropole has as its ambition to build an inclusive society for all people with disabilities, while preserving their autonomy and the full exercise of their citizenship. The Equality Department works in all public policy areas of Nantes Métropole, involving the departments and services.

Supporting the consultation bodies of the Metropolitan area

The Metropolitan Universal Accessibility Commission (CMAU)

Officially renewed on 21 October 2021 under the chairmanship of the Metropolitan Councillor in charge of universal accessibility, it gives substance to universal accessibility. It brings together associations representing people with disabilities, as well as representatives of the elderly, the economic and academic worlds, and elected officials.

The CMAU holds plenary meetings and special-focus workshops (transport, public space, major urban projects, etc.).

The Universal Accessibility Group 24 (GAU 24)

Composed of mayors and elected representatives responsible for disability policy in the 24 Nantes Métropole municipalities, the GAU 24 discusses and propagates metropolitan and municipal policies on disability and accessibility.

Associations of people with disabilities joined the mobility partners committee set up in 2021.

Improving accessibility in Nantes Métropole

- **Ensure pedestrian continuity with unencumbered footpaths:** The accessibility master plan identifies 600 km of routes to be developed as a priority, spread over all 24 municipalities. This involves, at the start of the mandate, an inventory of the accessibility status of these pedestrian paths, and defining a multi-year work programme.
- **Offer universally-accessible public transport and demand-responsive transport services:** With 100% of the public transportation network vehicles, 80% of bus stops and 100% of tram stops now benefiting from universal accessibility, the Nantes public transport network is one of the most accessible in France.

The 2019-2026 public service delegation agreement between Semitan and Nantes Métropole sets new accessibility objectives. For example, training for drivers on how to handle people with disabilities (co-developed with members of the Nantes Universal Accessibility Council (CMAU)) continued in 2021. The consultation with CMAU members continued on the improvement of the new Proxitan vehicles and on the new trams.

There was also a sustained focus on the project to redevelop the Gare de Nantes and surrounding area. There is regular consultation with the members of the CMAU. The accessibility of public transportation routes and stops during the work on the Place du Commerce was also the subject of consultation. Finally, the CMAU was also involved in the selection of the project manager for the enlargement of the Anne de Bretagne bridge.

- **Receiving users in adapted premises:** this is part of the Ad'AP planned accessibility agenda, which concerns nearly 200 public access buildings (ERP) and facilities that are open to the public (IOP). 166 public access buildings (ERP) have been made accessible since 2015, taking the overall accessibility of Nantes Métropole's building stock to 85%.

A guide to universal signage was also produced in partnership with users and associations, along with a catalogue of pictograms, with the aim of providing more information for everyone visiting the premises.

Acting for inclusive housing

Nantes Métropole is participating in the project launched by the Union sociale pour l'habitat (USH) to identify accessible and adapted housing in the social housing stock, alongside associations of people with disabilities. This approach led to a first census in 2021 and should provide for a change of the processing method for social housing applications, by taking better account of the applicant's level of adaptation.

The Community also finances new inclusive housing operations and the adaptation of old housing.

Nantes Métropole also supports associations that manage establishments, in particular by providing premises and plots of land.

Lastly, the equality department is helping to change public perceptions by offering a range of simulation-based awareness-raising aids, such as a suit for simulating ageing, a wheelchair tour, various displays, etc.

PULLING TOGETHER TO MAKE ALL DISTRICTS EQUAL

Increasing solidarity with working-class neighbourhoods, rectifying drop-outs, and supporting initiatives are the challenges facing the Community with regard to the city policy. 2021 was an opportunity to work collectively to define a roadmap shared between Nantes Métropole and the municipalities until 2026. It was also a question of continuing and amplifying the mobilisation in the direction of working-class neighbourhoods, as well as collaborations with the actors and inhabitants of the neighbourhoods.

The question of the reinforced mobilisation of all public policies of Nantes Métropole and the cities was the subject of particularly pronounced attention. It is a matter of considering these neighbourhoods that are falling behind on many levels (education, employment, standard of living, etc.) from the definition of public policies in order to concretely improve the situation of the inhabitants.

A shared roadmap for urban policy

2021 was an opportunity for lively exchanges between the vice-president for urban policy, the urban policy deputies of the four municipalities concerned (Nantes, Saint-Herblain, Rezé, Orvault), as well as with the vice-presidents in charge of the main public policies involved in the fifteen Nantes Métropole priority policy neighbourhoods.

This collective work resulted in a shared roadmap between Nantes Métropole and the municipalities for the period 2020-2026, with a common direction: improving living conditions for traveller communities; promoting the emancipation of the inhabitants and giving them the means to choose their life path; a contribution to changing the image of working-class neighbourhoods. The roadmap addresses four shared priorities:

- **neighbourhoods that build relationships and open up possibilities:** to support social links and initiatives, to make public spaces pleasant, safe and clean, to encourage emancipation and to reinforce access to rights from the earliest age and throughout life;
- **neighbourhoods mobilised for employment and activity:** to reinforce actions for the employment of young people in the neighbourhoods, to better reach the public in order to mobilise all of the support measures towards and in employment, to make the link between the inhabitants of the working-class neighbourhoods and employers, to support entrepreneurship, to maintain and develop trade, to implement a proactive prospecting action aimed at the installation of new companies;
- **connected and supportive neighbourhoods:** to reduce the digital divide and to accompany the skills ramp-up of the inhabitants and the local actors by mobilising three levers: an affordable connection, basic digital equipment, support for households towards autonomy with regard to procedures, school follow-up, social life, etc.;
- **neighbourhoods committed to solidarity-based and ecological transition:** work on the sustainability of economic models and the financing of projects that promote transitions (characterized by a central dimension of mediation and social support); structuring of channels and tools (platforms, storage places, resource centres, health centres, etc.); encourage the evolution of uses and practices; invite the inhabitants to become actors in the transformation of their living environment; strengthen the place of nature in global projects; support the rehabilitation of social housing by lessors.

Open governance reaffirmed for the city contract

Nantes Métropole steers the city contract with the State, paying particular attention to the mobilisation of partners and the association of associative actors and inhabitants:

- With regard to the city contract, the 2nd half of 2021 enabled Nantes Métropole and the four cities in question to define the method for evaluating the contract, that was extended until

2022. This was done in conjunction with the State, associations, citizens' councils and lessors within the steering committee;

- With regard to citizen councils: In accordance with the guidelines set at the start of the mandate, Nantes Métropole strengthened the mission of supporting citizen councils entrusted to Résovilles. Three citizens' councils were relaunched or renewed, in Plaisance, Dervallières and Bottière-Pin Sec. This approach combines the mobilisation of volunteers and the drawing of lots, and pays particular attention to the dynamics of building a real collective within each citizen council.

Support for local initiatives

The dynamics that emerged as a result of the health crisis were continued and amplified:

- in terms of food solidarity, the small urban farm in Saint-Herblain continued its actions and experiments. As for the Dervallières farm, the project set-up was defined. On another front, the VRAC association, supported by Nantes Métropole, deployed its action starting in May 2021 in the Bellevue (Nantes and Saint-Herblain), Breil, Dervallières and Bottière neighbourhoods in conjunction with a network of partners. In 8 months, 25 short-lived grocery stores were set up and 17 events around food or the discovery of producers were organised;
- Following the emergency actions deployed during the health crisis, several associations formed a collective (the Maison du Libre) to structure an action to fight against the digital divide. Nantes Métropole supported the action of this collective, that undertook its action in the neighbourhoods on the basis of the three pillars identified at the end of the health crisis:
 - organisation of flows for the recovery and reconditioning of computer equipment, with two experiments carried out in business parks with networks of companies to recover the equipment; the reconditioning is then performed by associative actors;
 - supporting lessors in defining and implementing the “low-cost connection” approach;
 - coordination and support to the actors of digital mediation, to which newly recruited digital advisers (State and local government funding) were added;
- the “Own the Public Spaces” initiative, which supported actions to improve and appropriate public space, carried out with residents: fresco in Ranzay, artistic animations on the place of Dervallières by the Luna, painting workshop of the blocks for the place François Mitterrand in Rezé with Solid'Art international, investment of the “grey square” in Breil by the architecture collective GRU, adventure grounds in Sillon de Bretagne and Plaisance (Céméa), etc.;
- In 2021, the “city contract” call for projects, jointly piloted by Nantes Métropole and the State in collaboration with the relevant cities, made it possible to support nearly 350 projects led by associations that are solidly rooted in the priority areas and help strengthen social bonding, education, integration, improvements to the quality of living and healthcare, etc. The number of projects increased (+5%), as did the overall volume of funding requested (+9%). This is also a consequence of the health crisis. In addition, in 2021, summer actions or actions in favour of digital technology, food solidarity and urban agriculture, educational success and school inequalities experienced a strong development. In total, support for projects represented in 2021 (excluding the educational success programme and the “cordées de la réussite”):
 - €1.5 million financed by the State;
 - €1.425 million financed by the communities (City of Nantes: €860,000; Nantes Métropole: €400,000; Loire-Atlantique Département: €108,000; cities of Saint-Herblain, Rezé and Orvault: €55,000);
 - €351,000 by the Family Allowance Fund;
 - €242,000 financed by the lessors.

An observation of the perception of the inhabitants of working-class

neighbourhoods: new edition of the Living Environment Barometer

This long term survey aims to measure how the inhabitants perceive the evolution of their living environment. It was carried out among more than 2,500 Nantes Métropole residents (150 per neighbourhood in 18 defined sectors) and 300 questionnaires were sent to residents outside of the city's priority neighbourhoods (QPV). This survey conducted in May 2021 (after the 3rd lockdown) is the 4th wave of the GUSP Barometer (Urban and Social Management of Proximity) after those of 2012, 2014 and 2018 .

The figures for residential mobility, like those for turnover rates within the social housing stock, are generally declining in the working-class neighbourhoods of Nantes Métropole, demonstrating less fluidity in residential life. The fact remains that there continues to be a significant renewal of the inhabitants of the neighbourhoods: 44% of respondents have lived in their neighbourhood for under 5 years.

72% of neighbourhood residents find their living environment pleasant. This figure is lower than outside of the city's priority neighbourhoods (92%). This 2021 edition of the GUSP Barometer confirms that the security situation is the primary factor affecting the feeling of quality of life in the neighbourhood. Overall, 38% of residents say they feel personally exposed to problems of insecurity or incivility in their neighbourhood, including 17% who feel "very strongly" about it.

2/3 of the inhabitants declare that the animation and the "lively" character are assets of the city's priority neighbourhoods. Overall, residents are fairly likely to feel that it is easy to find activities for themselves and their families (56%) and that community and cultural life is very well developed in their neighbourhood (55%).

It appears that social interactions decrease significantly in the results of this barometer (36% of respondents say they "don't know or talk to anyone or hardly anyone" within their neighbourhood - up from 27% in 2018), with the impact of the health context being quite evident. However, there has also been an improvement in the quality of relationships between residents. Indeed, 69% of people rate them as somewhat or very good, with a somewhat favourable trend (57% in 2018).

65% of those surveyed say they enjoy walking in their neighbourhood and 76% feel there is a lot of green space. In addition, the residents who consider that the quality of life has improved in their neighbourhood cite the development of public spaces, the beautification of the neighbourhood, green spaces, shared gardens, parks and playgrounds as the primary factors in this improvement:

- 69% of residents were satisfied with the maintenance and cleanliness of public spaces in their neighbourhood (30% dissatisfied). In terms of trends, this satisfaction level is down slightly since 2012 (-4 points). These figures are fairly close to those noted outside of the city's priority neighbourhoods (73% satisfied – 27% dissatisfied). The issues easily raised by the respondents particularly highlight littering and problems related to the specificities of bulky waste collection and underground waste containers.
- About 3/4 of respondents find their building "pleasant" or "very pleasant" and are satisfied with the maintenance of common areas, with these numbers being stable since 2012. The main negative aspect of housing is noise, with 43% of residents feeling that their housing protects them poorly from noise (including 18% very poorly).

These elements are shared with the city's policy partners (notably State and lessors). They constitute an essential working basis for the definition of local urban and social management actions.

TAKING ACTION TO ENSURE GENDER EQUALITY

A vector of social cohesion on a metropolitan scale, gender equality is a real issue for the territory. Nantes Métropole has also been a signatory of the European charter for gender equality in local life since 13 April 2015.

This desire is reflected in the special attention paid to this issue, with a focus on the Nantes Métropole public policies.

Several actions were implemented in 2021 in various fields: employment, economic development, fight against violence, public procurement, human resources management...

Encouraging female entrepreneurship in the local area

Nantes Métropole is committed to supporting women's entrepreneurship by giving women the means to act. As it stands, just 32% of businesses in France are started by women. In response to this observation, Nantes Métropole has deployed a roadmap since 2017 to support a series of actions in favour of equality in entrepreneurship.

Support for the networks of stakeholders in the creation process also simplifies the journey for women with creation or takeover projects: support, financing, accommodation and development. In 2021, the "Osez entreprendre" scheme continued to support and finance the creation of businesses in the working-class districts of Nantes.

Supporting equal pay initiatives

The #NegoTraining workshops developed by the Nantes Métropole's CSR platform and led by the Audencia CSR Chair enable women to gain confidence and put into practice effective strategies to facilitate wage negotiations. In 2021, 58 workshops were held, including 33 online, benefiting 579 women.

■ Supporting associations working to tackle violence against women

Nantes Métropole supports associations that are working to tackle violence against women. These organisations help victims of domestic violence, family violence and incest or sexual abuse. They offer support so that women can be taken in charge and helped to escape the cycle of violence, fear and guilt. These associations develop awareness-raising and information campaigns for the general public, professionals and institutions, with actions focusing on the perpetrators of violence. In 2021, given the increased number of domestic violence cases, Nantes Métropole increased its support to these associations.

Advancing gender equality through culture and high-level sport

The metropolitan cultural facilities (art museum, Jules Verne museum, Castle of the Dukes of Brittany, etc.) are developing a programme that highlights women in the history of Nantes, particularly during the European Heritage Days.

Supporting high-level women's clubs encourages the practice of sports for all. The renovation of the metropolitan sports facilities takes into account the issues of gender diversity (changing rooms) to facilitate the practice of sports for women.

Equal employment, a central focus of HR management by the community

Issues of gender equality in the workplace are brought to the fore in the "Workplace equality, diversity and gender balance" initiative carried out in municipal and metropolitan departments. The internal charter circulated to all employees sets out its main objectives:

- promote equality for all within the departments;
- strive to reflect population diversity in the departments;
- Over and above the statutory guarantees, and for equivalent levels of competency, ensure effective gender equality in the workplace by fostering a better gender balance in jobs and levels of responsibility.

The Diversity - Equality dual certification scheme, which leverages all the relevant players, makes it possible for companies to commit to continuous improvement in order to guarantee and promote real equality for all. Following an on-site audit carried out by AFNOR Certification from 14 to 22 October 2019, Nantes Métropole, the city of Nantes and its Municipal Social Welfare Centre (CCAS) confirmed that they had obtained their diversity certification and had been awarded the Gender Equality in the Workplace mark of approval for the first time.

Some of the flagship initiatives conducted by the City of Nantes and Nantes Métropole with regard to gender equality in the workplace included:

- opening of a new consultation process with a view to adopting an action plan for equality and professional gender mix;
- implementation of the SASS (Reporting Sexual and Gender-Based Violence) system in the workplace in April 2021, which makes it possible to collect and process all reports of gender-based violence, sexual violence and sexual harassment at work. The system's structure is based on the proposals of the Internal Advisory Council on Equality, Diversity and Gender, which brings together staff representatives and volunteer employees;
- development of a communication campaign to fight against stereotypes and prejudices based on a web series aimed at deconstructing representations, particularly those related to gender. Created by and with the agents of the Internal Advisory Council on Equality and Diversity, this web series has been broadcast since 2022;
- recruitment guide: summarising the principles of non-discrimination and promotion of equality and professional diversity (non gender-specific job titles, diversification of recruitment pools, raising the awareness of recruitment panels on combating stereotypes and prejudices, etc.);
- actions to promote careers in the local civil service (FPT), including job forums, work placements and apprenticeships: 302 people hosted on work placements at Nantes Métropole in 2021, including 133 women, as well as 12 apprentices on 31 December 2021, of which 3 were women; 7 new apprenticeship contracts were signed, including 2 for women (2021/2022 period);
- an in-house awareness-training group on gender balance and diversity, which runs sessions in the various departments (a total of 32 women and 26 men received awareness training in 2021);
- measures to facilitate parenthood and ensure a better work/life balance (PGJE, CESU, special leave, etc.);
- continuing adaptation of the PPCR (career and compensation protocol) and the RIFSEEP (public service pay schedule), which help to reduce some of the inherent discrepancies in

status. These measures to improve career development and pay have particularly benefited female employees in categories A, B and C;

- coordination of the internal equality, diversity and gender equality Advisory board, a forum for dialogue on equality issues that brings together trade unions, employee volunteers (50 members) and local government representatives. The proposals of the working groups (age management, prevention of sexist behaviour and gender-based violence in the workplace, etc.) are used to inform the HR policy;
- as part of the relaunch of the “Equality at work” training cycle and in a format adapted to the health context, 150 agents were trained in 2021. More than 6,000 agents have attended these sessions to date.

Selected figures and extracts from the 2020 and 2021 corporate data

- 3,841 employees (civil servants or contractual employees recruited for vacant posts) in Nantes Métropole on 31 December 2021, of which 1,445 are women, 70% in the administrative field and 24% in the technical field.
- 24.57% of women and 4.55% of men are part-time as of 31 December 2021.
- 4,015 days of training (excluding preparation for competitive examinations) were provided in 2020, 30.51% of which were for women. 727 days of training in preparation for competitions were carried out, 43.46% of which were by women.
- In 2021, for permanent staff (civil servants and contract staff recruited for vacant posts) the following data are available:

Average net monthly earnings			
	Men	Women	Total
A category	3 495,03 €	3 260,34 €	3 362,62 €
B category	2 331,87 €	2 197,31 €	2 268,49 €
C category	1 920,59 €	1 805,56 €	1 892,14 €
Total	2 237,73 €	2 416,53 €	2 303,28 €

It should be noted that the proportion of women in category A is preponderant. The vast majority of men are represented in category C.

ACCOMMODATING MIGRANTS FROM EASTERN EUROPE AND ELIMINATING ILLEGAL CAMPS

For several years now, the Nantes Metropolitan Area has been experiencing precarious housing camps occupied illegally by Romanian migrants, including many from the Roma minority.

Since 2018, in collaboration with the State, the Department and the 24 municipalities, Nantes Métropole has been piloting an urban and social project management initiative (MOUS) aimed at gradually reducing these camps and helping their inhabitants to integrate. The operational implementation of this initiative is delegated by public contract to the Saint-Benoît Labre association.

2021 was devoted to finalizing this project and preparing a more ambitious roadmap for the future, based on both the positive feedback and the shortcomings of the MOUS.

In 2021, the comprehensive social support mission for households living in slums was renewed by an amendment to adapt to the exceptional context of the health crisis and to allow for the collective construction of a second act of the public policy for the reduction of slums.

Globally, the MOUS social workers work with families on:

- finding more dignified housing (accommodation, halfway housing);
- assistance with professional integration (learning French, vocational training, finding a job);
- establishing and safeguarding rights, particularly with regard to social protection;
- challenges related to academic and educational inclusion.

Some quantitative data over the duration of the MOUS (2018-2021):

- 146 households, i.e. 488 people, including 215 minors, signed up for contractualized social support.
- as a result, 44 households accessed housing or accommodation in 2019.
- 31 households are engaged in a pathway to integration.

In addition to the MOUS, Nantes Métropole continued the actions undertaken to improve living conditions in the slums, notably to guarantee the fundamental right of access to water (consolidated partnership with the specialised operator Solidarités International and active mobilisation of the relevant metropolitan departments). The community also continued to develop mediation actions in the field of health or schooling, areas that are essential for the integration of the public in local life.

Finally, 2021 was essentially devoted to the collective construction of a roadmap that will constitute act 2 of this public policy to go beyond the tangible but insufficient results produced by the MOUS project. The ambition of this second act, which mobilises all of the stakeholders, both institutional and associative, is to make this public action a long-term process, based on common law, and to aim for the real elimination of slums in the region.

CLIMATE PLAN AND ENERGY TRANSITION

Nantes Métropole's climate objectives are to reduce greenhouse gas emissions to 50% below the 2003 per capita level by 2030. The Nantes Métropole energy and climate objectives looking ahead to 2050 were reinforced with the ambition of a metropolis using 100% renewable energy (EnR) and achieving carbon neutrality. These objectives will only be achieved by increasing energy sobriety in all metropolitan public policies (energy efficiency, production of renewable energy, etc.).

Nantes Métropole is helping to secure energy supply and curb the associated expenses. It is continuing its efforts to improve its local management schemes, develop local renewable energies and improve the linkage between its energy networks (electricity, gas and heating).

A long-standing and recognised commitment

For many years, Nantes Métropole has been committed to combating climate change. With the adoption of its first Climate Plan in 2007, it is one of the pioneering French communities in this field. In 2008, Nantes Métropole joined the Covenant of Mayors, a European movement of elected officials committed to climate and energy. In 2015, it was awarded the Cit'ergie label, five years after the city of Nantes, itself one of the first communities to receive the label in France. Selected as the European Green Capital in 2013, Nantes Métropole is recognised internationally as a reference on environmental issues. That same year, it also hosted the World Summit of Mayors on climate change.

The Grand Débat Transition Énergétique, conducted in 2016 and 2017, allowed for a very large consultation of stakeholders in the Nantes Métropole territory (200 days of debate, 53,000 participants). It led to the drafting of the energy transition roadmap, which in turn fed into the new Local Climate, Air and Energy Plan (PCAET), adopted on 7 December 2018 by the Metropolitan Council with three main objectives:

- 50% reduction of greenhouse gas emissions per inhabitant by 2030;
- 50% reduction of final energy consumption per inhabitant by 2030;
- 20% of energy consumption covered by local renewable energy in 2030.

Mid-point assessment of the Local Climate, Air and Energy Plan

The regulatory mid-point assessment of the PCAET initiated in 2021 is an opportunity to measure the progress of actions in favour of the community's energy and climate objectives and to assess the efforts still to be made.

As such, the changes to the implemented actions are the following:

- 10% of the actions have been completed (Nord Chézine heating network, bicycle structuring plan, 100% electric busway, biotope coefficient in the PLUm, etc.);
- 65% of the identified actions are underway (energy renovation of private housing, support for renewable energy projects, promotion of intermodality, reuse / circular economy, etc.);
- 20% of the actions are still in the framing phase;
- 5% of the actions have been abandoned in their initial form, either because they were attempted without convincing results, or because they were redirected to actions deemed more efficient.

In addition to the progress of the actions, the climate-air-energy policy of Nantes Métropole and the City of Nantes was assessed in parallel as part of the Cit'ergie approach. As a reminder, Cit'ergie is a management and labelling programme that rewards communities for implementing an ambitious climate-air-energy policy based on a set of 60 demanding measures that are updated on a regular basis. With a score of 77%, Nantes Métropole and the City of Nantes received the Cit'ergie Gold label in 2021. As such, Nantes Métropole is the most populated European territory to be awarded this label of excellence.

This recognition is the result of a long-standing mobilisation of Nantes Métropole and the City around climate actions. Despite the achievement of this level of excellence, 17 new sites have been identified and will be the subject of particular attention in the coming months.

Finally, the last BASEMIS® inventory of reduce greenhouse gas emissions in the territory published in 2020 indicates that between 2003 and 2018:

- greenhouse gas emissions per capita have been slashed by 24%. However, the continuously growing number of inhabitants over the period (+22%) translates into an 8% decrease of the territory's emissions;
- energy consumption decreased by 12% per capita. However, the continuously growing number of inhabitants over the period (+22%) still means a 7% increase of energy consumption.

Ongoing initiatives to coordinate, advise and support citizens

- operational roll-out of the “Mon Projet Rénov” comprehensive aid package to meet the “zero energy leakage area” target set in the energy transition roadmap. As a reminder, an annual budget of €7 million was approved to help finance the energy renovation of 1,000 homes per year (either detached houses or co-owned buildings). Low-income households are eligible for higher subsidies;
- implementation of the new France Rénov energy renovation territorial platform, run by the Association Ligérienne d'Information et de Sensibilisation à l'Énergie et à l'Environnement (Alisée), with 3,200 contacts in 2021 (2,521 contacts in 2019) and 270 half-days of office hours, 95% of which were staffed;
- Implementation of two general interest programmes (PIG) Mon Projet Rénov co-ownerships and households for the period 2021-2025 led by Soliha and Citémétrie with ambitious objectives of energy renovation of 150 co-ownerships and more than 4,000 homes;
- launch of a collective energy renovation project in the Bois Raguenet neighbourhood of Orvault (650 homes): public meeting, thermography of housing, 30 energy audits.

Supporting energy-renovation projects in houses and residential blocks

Nantes Métropole has continued its support for energy renovation in line with the roadmap. For example, standout events in 2021 included:

- the financing of 33 audits and 13 project managements for low-energy building projects in condominiums and 112 audits for low-energy building projects in houses;
- aid for energy renovation work for 694 private homes, including 280 BBC (low-energy building) homes in condominiums, 17 houses with a BBC project and 212 projects for households with Anah (National Housing Agency) resources;
- a total commitment of more than €4 million of Mon Projet Rénov subsidies for studies or work that contribute to the energy renovation of residences or residential buildings.

Overall outcome

Since 2011, 401 residential buildings (22,600 homes) have been supported by Nantes Métropole; 53 of them opted for energy-efficient renovation work, i.e. 4,145 homes renovated, including 1,750 low-energy homes.

Since the start of our support scheme for individual houses in 2018, 274 audits have been carried out, 49 houses have been renovated to energy efficiency standards.

The energy renovation of social housing and tertiary sector housing stock

Regarding social housing, an initial aid scheme direct from Nantes Métropole, eco-conditioned by the achievement of an ambitious level of performance, has been in force since 2019 with:

- aid of €5,000 per dwelling, capped at 50% of the cost of the energy work, for operations that achieve, after rehabilitation, an energy performance level < 64 kWh/m²/year, corresponding to the BBC (low-energy building) renovation level -20%;
- aid of €10,000 per dwelling, capped at 50% of the cost of the energy work, for operations that achieve, after rehabilitation, an energy performance level < 50 kWh/m²/year, corresponding to the Energy BBC (low-energy building) level.

This initiative resulted in the funding of 3 operations in 2021:

- the Talèves residence in Orvault, with 84 units, reaching a renovation BBC level after works

- of -20%;
- the Guérande residence in Rezé, with 40 units, reaching a renovation BBC level after works of -20%;
- the Penfeld residence in Orvault, with 84 units, reaching an energy performance level below 50 kWh/m²/year.

In December 2021, the Metropolitan Council supplemented the existing support initiative by adding possible grants for operations attached to the EnergiSprong programme.

This programme, led by the Union Sociale de l'Habitat des Pays de la Loire, consists of deploying energy renovations to a large number of social housing units through grouped orders between social operators. The objective is to guarantee an "Energy 0" level in order to fight against energy insecurity in households.

For tertiary buildings, an assessment to identify the consumption of tertiary buildings and target consumer typologies was carried out in 2019 by AURAN (Nantes Region Urban Planning Agency) as part of the Energy Master Plan.

A territorial facilitation system was then developed to support owners, occupants and managers of tertiary buildings over 1,000 m² with the implementation of the regulatory obligations arising from decree n° 2019-771 of 23 July 2019. In this way, the aim is to reduce energy consumption by 40% by 2030 and by 60% by 2050. This initiative is being deployed by the Novabuild association, with the support of Nantes Métropole and the French Institute for Energy Performance in Buildings (IFPEB).

For tertiary buildings of less than 1,000 m², a support initiative is proposed within the framework of the Energy Renovation Territorial Platform and led by Alisée.

A voluntary public energy policy

Over and above the objectives of reducing greenhouse gas emissions, Nantes Métropole must ensure a sustainable supply of energy for its local stakeholders in the context of an energy sector in major upheaval. Its public energy policy focuses on two strategic priorities designed to bring about the energy transition.

Develop and optimise public energy services to best suit the needs of users, i.e.:

- strengthening energy transition goals;
- optimising the management of public electricity and gas supply services;
- continuing to develop affordable renewable heating;
- guaranteeing public services that meet user needs as closely as possible.

Reduce the energy footprint of the local area, consume less energy and produce more energy by:

- managing the technical and financial aspects of energy use in local government assets (leading by example);
- making existing housing more energy efficient;
- achieving the targets of the PCAET, including a local energy consumption mix consisting of 50% locally produced renewable energy by 2050 (20% by 2030) and halving final per capita energy consumption between 2003 and 2030.

To implement these two strategic priorities, the following steps were taken in 2021:

- the pursuit of a collaborative study with AURAN, the departments of urban planning, transport, housing, economic development and logistics for the development of an Energy Master Plan, to identify scenarios for the production of renewable energy (RE) and the reduction of local energy consumption that are needed to achieve the objectives of the PCAET;
- In 2014, Nantes Métropole continued its efforts at a national level to call for the creation of an energy organising authority, as a necessary first step to ensuring the success of the energy transition.

- **electricity distribution**, i.e. its transport on low and medium-voltage lines from the

substations (which interface with the transmission grid) to customers' electricity meters. Awarded to Enedis (formerly ERDF) by Nantes Métropole, this concession contract represents 2,992 GWh of electricity distributed for consumption, a grid of 5,939 km, 393,688 supply points and more than 3,434 production points, of which 3,399 are photovoltaic. 2021 was marked by the launch of negotiations for a new concession and electricity distribution contract. The aim is to renew and unify the 4 existing contracts into a single contract for Nantes Métropole as a whole, based on the model negotiated by France Urbaine, the FNCCR, ENEDIS and EDF at the national level. The contract must integrate the territory's local issues and is accompanied by an ambitious ecological transition framework agreement;

- **gas distribution**, i.e. its transport on low and medium-pressure networks from the source points (which interface with the gas network) to customers' gas meters. Awarded to GRDF by Nantes Métropole, the concession represents 3,430 GWh of gas distributed, a network of 2,354 km and 192,217 active supply points connected;

District heating networks are expanding

Three objectives:

- to give as many inhabitants as possible access to secure and affordable energy: by 2021, more than 37,000 homes are now connected to district heating networks; half of them will be social housing managed by the City of Nantes;
- to enable the development of locally-produced renewable energy;
- to reduce greenhouse gas emissions (45,700 of CO₂/year in 2021, i.e. 10% of the overall target of the Local Energy and Climate Plan).

Heating networks already in operation:

- **the Centre Loire heating network:** at the end of 2020, the network stretched over a combined length of 80 km, an additional 61 km since 2012. The network is mainly fuelled by heat generated by waste incineration at the treatment and recovery centre at La Prairie de Mauves (by wood and lastly gas as a backup option, if necessary). To this end, the Malakoff district heating plant (30 MW wood-burning plant) is supplemented by the Californie plant (8 MW wood-burning plant). The network currently services 19,600 homes and numerous facilities, running on around 80.5% of renewable and recoverable energy. Further extensions and accesses to the network will be made over the coming years: this rate is expected to reach the target of 84%;
- **the Bellevue district heating network:** this network, operated by the Nadic company (DALKIA), was servicing over 9,962 homes in the west of Nantes and in Saint-Herblain at end-2020 and comprised a total linear distance of 25 kilometres of piping. The heat is produced by a 13 MW wood-fired plant commissioned in 2013. It uses over 55% of renewable energy to supply the network;
- **the heating network supplying the ZAC de la Noë in Saint-Jean-de-Boiseau:** operated by NOVAE (IDEX), the network is supplied by a wood-fired heating plant that covers an average of 60% of heating needs and serves 140 housing units. Since 2018, its management has been integrated into the new Nord Chézine public service delegation contract;
- **the heating network supplying the ZAC La Minais in Sainte-Luce-sur-Loire:** operated by IBEM (IDEX), the network is supplied by a wood-fired heating plant that covers more than 60% of heating needs and serves 250 housing units. A users' committee allows regular communication between users and operators with a view to continuously improving the service;
- **the Nord Chézine network:** operated since 2017 by NOVAE (IDEX), it is largely supplied by the Arc en Ciel waste processing and recovery plant. The network covers the northern Nantes neighbourhoods (Bout-des-Landes, Bout des Pavés, Boissière, etc.), in Orvault and Saint-Herblain. By the end of 2020, 30.3 km of network had been laid and 6,787 homes supplied with heat.

It should be noted that the further development of heating networks up to 2030 is currently being analysed with the completion of the Heating Networks Master Plan. It will be completed in 2022 and will serve:

- to refine the development potential of new heating networks;

- to densify and extend the existing heating networks;
- to identify the heat sources that can be mobilised in order to meet new needs.

A local area that produces renewable energy

The Renewable Energies action plan will significantly increase the production of local renewable energies, while at the same time reducing the use of fossil fuels, which emit substantial amounts of CO₂.

In 2018, Nantes Métropole set an ambitious goal of achieving 50% local renewable and recovered energy in the territory's energy consumption by 2050. However, within the framework of their new mandate, the Nantes Métropole elected representatives decided to raise the consumption objective to 100% renewable energy (i.e. carbon neutrality).

In April 2021, the Energy Master Plan (SDE) was approved by the Metropolitan Council, thereby making it possible to focus the production levels to be reached by type of renewable energy and according to the targets (example: large surface solar roofs) in order to attain 50% renewable and recovered energy by 2050 (intermediate step in 2030). In this scheme, it is foreseen to ally with other territories to respect these designs.

Highlights in 2021 included the continuation of the "Soleil" (Sun) action plan that bolsters the solar-related initiatives undertaken over the past few years:

- renewal of an online solar land registry to be placed online by mid 2022;
- completion of feasibility studies for the "100% useful private roofs" project, which aims to create 15 large solar, vegetation or urban agriculture installations on the largest rooftops in the territory, in partnership with the SPL LAD;
- support for citizens' groups with renewable energy projects.

In addition, Nantes Métropole also focused its action on other renewable energy sectors, notably renewable heat with the continuation of the COTER objective contract initiated in 2018 and financed by ADEME, with the aim of developing renewable heat with the private and public sectors (wood energy, recovered heat, solar thermal, geothermal). The ambitious aim is 18 projects that will enable the production of 573 TOE (tons of oil equivalent) of renewable energy over 3 years.

Communities setting standards, regardless of their size

Continuation of the shared energy advisory service (CEP) for the communities, initially launched on the 1 January 2018. The aim of this scheme is to provide guidance and support to communities with fewer than 10,000 residents in Nantes Métropole by pooling the services of an operational energy advisor, that can:

- carry out energy assessments, analyse and track the energy consumption of local authorities' building stock;
- perform energy audits of buildings and recommend ways to reduce energy consumption;
- guide and support local authorities' energy efficiency projects;
- raise awareness and train municipal teams in energy issues and the uses of public property.

Nine of the 13 eligible municipalities joined the scheme from its launch in 2018: Basse-Goulaine, Bouaye, Brains, Indre, La Montagne, Les Sorinières, Mauves-sur-Loire, Saint-Aignan-Grandlieu and Sautron. In 2019, 3 new municipalities of less than 10,000 residents applied to join the scheme: Le Pellerin, Saint-Jean-de-Boiseau and Saint-Léger-les-Vignes. All 13 eligible municipalities are now members. Thouaré-sur-Loire has also joined the scheme.

The member municipalities lacking in-house energy expertise are provided with support with regard to their projects. Between 2018 and 2021, more than 40 projects were supervised by the CEP scheme. Finally, since 2021, support for the implementation of the Tertiary Eco-Energy Decree has become a central issue for the municipalities benefiting from the initiative.

Optimisation of public lighting, illuminated signs and shops

In 2021, Nantes Métropole continued its public lighting energy optimisation initiative and achieved its

goal of a 30% reduction of the electricity consumption of its public lighting since 2016. While applying the “rational lighting” (energy sobriety) principle, it continued to work on adapting lighting to actual requirements. Where appropriate, lighting levels in some areas have been dimmed by:

- replacing old light bulbs and lamps with energy-efficient alternatives such as LEDs;
- continuing to switch off lighting completely in some neighbourhoods with municipalities that wish to do so (20 municipalities have currently committed to doing so);
- limiting middle-of-the-night street lighting to: main streets, town centres and business districts.

At the same time, Nantes Métropole also monitors developments in innovative lighting solutions (LEDs, motion detectors, etc.).

The Lighting Development Consistency Plan has now been finalised.

NB:

- A study by CEREMA in collaboration with the departments of Nantes Métropole served to define the method for preparing a dark grid while taking into account the effects of illuminated areas on biodiversity, with the aim of implementing measures to preserve fauna and flora.
- Following the new contract awarded to JCDecaux in 2017 (municipalities of Nantes, Rezé, Saint-Herblain, Saint-Sébastien, Orvault, Sautron and La Chapelle-sur-Erdre), the number of street furniture units in the metropolitan area (of between 2 m² and 8 m²) has been reduced by 12% (a total of 840 units, compared to 952 previously).
- An awareness campaign on managing energy consumption in shops and businesses is currently being prepared. The aim is to highlight the issue of lighting and illuminated signs, in line with the new regulation on the limitation of light pollution of December 2018.

Key figures in 2021

- At the end of 2020, the territory has 5,939 km of electricity grids, 2,354 km of gas networks and 145 km of district heating networks.
- More than 37,600 homes (11% of the territory's homes) connected to one of the 7 heating networks in 2020.
- 69% of the heating distributed by the heating networks comes from renewable and recoverable sources (wood and waste) in 2020.
- 54% of heat distributed in 2020 is to housing, and 46% to other public and private facilities.
- Photovoltaic production in the territory multiplied by more than 2.5 times between 2017 and the beginning of 2021, thanks to the implemented large-scale installations (MIN, Tougas, Urbasolar power plants in Saint-Aignan de Grand Lieu and Zenith shades).
- 8.1% of the territory's final energy consumption come from renewable and recovered energy sources at the end of 2020.

URBAN TRAVEL: IMPLEMENTING THE OBJECTIVES OF THE URBAN TRAVEL PLAN

Replacing the 2010-2015 plan, the 2018-2027 Urban Travel Plan (PDU) “Outlook 2030” was adopted by the Metropolitan Council on 7 December 2018. It is the roadmap for the travel policy, which is implemented on an ongoing basis. Several steps initiated or completed in 2021 to achieve the PDU objectives.

The highlights in 2021 include:

- implementation of free public transport on weekends and a 20% reduction of season tickets. Free parking is also available in the controlled-access park-and-ride lots, which have nearly 5,000 spaces;
- approval of the 2035 Public Transport Master Plan. It includes the conclusions of the consultation process for the development of new tram lines that ended in 2021. The commissioning by 2027 of two new tram lines, a new electric busway line and the extension of lines C9, C7 and C20 has been validated. This plan also includes other important developments to improve the territory’s network: L1 and L2 connection, transformation of the L54 into a Chronobus, extension of the L4, new river shuttle, improvements to various lines;
- approval of the Cycle Route Development Master Plan, backed by the guidelines for cycling facilities. The SDIC defines the priority routes to be developed in order to help achieve the modal share objectives set for cycling by 2030. The aim is to create a genuine metropolitan bicycle network defined in consultation with the municipalities of Nantes Métropole. By 2026, 50 kilometres of the main or structuring network will be developed;
- new regulations for deliveries in the Nantes city centre to encourage the use of clean vehicles. In pedestrian areas, red parking zones and the Limited Traffic Zone, “clean” delivery vehicles (electric, NGV, hydrogen) benefit from extended delivery time slots compared to other vehicles;
- a modification of the parking provisions in Nantes, with an extension of the paid parking zone and a revision of the hourly rate, in order to encourage rotation to improve accessibility to the city centre while facilitating parking for residents of the relevant neighbourhoods;
- continued roll-out of the traffic-calmed city in the Nantes Métropole municipalities;
- Continued adaptation of the public transit offer in connection with the Covid crisis;
- to promote river mobility, the launch of the “Flots” call for projects, which led to the selection of 8 projects that promote travel and services on the Loire;
- the arrival of a second car-sharing operator;
- the completion of studies, including:
 - validation of the master plan for all modes of access to the Nantes Atlantique airport sector by all partners (State, Region, Department, Nantes Métropole, federations of municipalities, etc.);
 - traffic studies, development studies and works on the ring road and the main roads (notably carpooling and public transport lanes);
 - support for a self-driving shuttle project run by the SNCF on the old Doulon-Carquefou railway line;

- travel and parking studies at various scales, including the North East Quadrant Study, which was completed in 2021; studies are underway in the communities of Saint-Sébastien-sur-Loire and Couëron and on the “all modes” accessibility plan for the Nantes urban core area;
- The launch of discussions on the implementation of a Low Emission Mobility Zone (ZFEm);
- rail studies, in conjunction with the Region (Nantes rail hub, Nantes-Angers-Sablé axis, Nantes-Rennes rail link).

ORGANISED, COMPLEMENTARY AND ACCESSIBLE TRAVEL NETWORKS

Nantes Métropole benefits from an efficient and coordinated public transport network, consisting of TAN buses and trams, Aleop coaches and TER regional trains, servicing all of the municipalities in the conurbation.

More than 116 million journeys were made on the network in 2021, a 21% drop of passenger numbers due to the health crisis in comparison with 2019 (last year before Covid). The coverage also fell for the same reason, dropping to 28.73 million km in comparison with 2019.

Highlights in 2021

- A still significant Covid impact in 2021:
 - the network recorded 116.12 million journeys in 2021 (-21.8% compared with 2019);
 - an estimated revenue loss of €12.6 million compared to 2020;
 - the difficulties encountered in recruiting the driving personnel needed to operate the network. Absenteeism was amplified by sick leave due to the health crisis without the possibility of replacement.
- An increase of the offer in September 2021:
 - It corresponds mainly to the reorganisation of the service in the southwest territories (creation of routes 38 and 118, modification of routes 8 and 98);
 - other offer adaptations to be mentioned:
 - improvement of the operating times of the E1 line;
 - modification of the line 91 night service offer;
 - improvement of the frequency of the E28 line;
 - experimentation of a shuttle on the Indre, providing service to the market;
 - extension of the experimentation of the river link on the Erdre between La Chapelle-sur-Erdre and Carquefou;
 - optimisation of service on green days (modification of the commercial calendar in May and adjustment of the peak time on lines C1, C2 and C4) and yellow days, excluding free Saturdays (service adjustment on lines 2, 3, 4 and 5);
 - suspension of the frequency increase on line C1 implemented in 2020.
 - validation of the accessibility master plan for all modes of transport in the airport sector, including the decision to build a rail stop on the Nantes / Sainte-Pazanne line and the creation of a High Service Level Bus line between the airport and Nantes station;
 - renovation of the tram line 1 Feydeau-Commerce completed in the summer of 2021;
 - continuation of structuring projects to improve the service, the network and the accessibility of the territories:
 - acquisition of 61 new tram cars with greater capacity (+20%) and 100% accessibility. Alstom has been chosen to build the new tram cars in order to replace the 46 older ones and to support the network development projects. At the same time, work was started to adapt the existing infrastructure and CETEX to allow these new, longer trains to run on the network;
 - extension and connection of lines 1 and 2, Phase 2 / CETEX Babinière: continuation of the studies to extend the tramway line 1 from Ranzay to Babinière, as well to build a new CETEX tramway (to accommodate the new tramway cars currently being acquired) and to build the new Park-and-Ride facility with 550 places;

- development of new tram lines: following the consultation held from late 2020 to early 2021, approval of a public transport master plan for 2035;
- transfer of the Nantes-État railway facilities: continuing of the work to clear the Nantes-État site (approximately 16 ha) of railway facilities in order to allow the urban development of the Sud Ouest Comprehensive Development Zone on the île de Nantes to be carried out, and more specifically the installation of new tramway infrastructure; transfer planned for the end of 2022.
- continuation of studies on the creation of reserved carpooling on public transit lanes in Nantes Métropole:
 - route de Pornic, boulevard de la Vendée sector;
 - experimentation planned for 2022 in the Prairie de Mauves sector.
- continued implementation of development projects on the ring road validated in 2016 (consultations concerning the Bellevue Bridge and the section between the Estuary and Atlantis gates);
- launch of the redevelopment of the Porte de Gesvres with delivery scheduled for 2024.

Key figures in 2021

- 3 tram lines (45 km network).
- 1 busway (12 km).
- 8 Chronobus lines (84 km network).
- The conurbation is served by a network of 44 bus lines.
- 3 Navibus lines (Erdre et Loire).
- The TAN network recorded 116.12 million journeys.
- Covoit'Tan: 1,941 signups at the end of 2021. In 2021: 784 Libertan subscribers transported; 8,887 journeys made.

TO PROMOTE LOCAL, GENTLE AND CALM MOBILITY

The construction of a quality calm public space for the use of pedestrians and cyclists is a way to give priority to local travel and to meet the challenges of ecological transition and public health.

In 2021, Nantes Métropole continued to support the promotion of active modes (cycling and walking).

Limitation of motorized traffic

Traffic management plays a major role when it comes to changing habits and fostering better coexistence / mobility between various road users in urban areas.

To do this, it is necessary:

- to reduce the danger level of traffic, particularly by lowering speed limits;
- to give greater priority to soft transport modes (cyclists and pedestrians).

In 2021, average total traffic in the conurbation decreased 10% compared to 2019 (+12% between 2020 and 2021). The average journey time fell by 11% in the morning and 12% in the evening, compared to 2019. This traffic decrease is due to the implementation of restriction periods during the Covid pandemic, the development of teleworking, and resulting behavioural changes.

In this respect, the health crisis led Nantes Métropole to accelerate the development of measures to promote walking and cycling in the city.

In this sense, a strategic study was launched on the extension of pedestrian areas and the limited traffic zone in the Nantes city centre in order to propose achievements that can be implemented in the current and next mandate.

Finally, discussions began on the implementation of a Low Emission Mobility Zone (ZFE_m), a regulatory obligation that will apply to Nantes Métropole from 2025.

Actions in favour of cycling in 2021

- validation in February of the cycle route development master plan, backed by the guidelines for cycling facilities. The SDIC anticipates the construction of 50 km of masterpiece roads by 2026, for which feasibility studies are underway;
- completion of 33 km of facilities throughout the metropolitan area, bringing the total length of cycling infrastructure to 782 km, including 131 km of cycle paths, 70 km of bidirectional cycle routes and 339 km of cycle lanes. For example, we note the delivery and the staking of the new section of the Loire à Vélo / Vélodyssée itinerary between Rezé and Bouguenais by the Cheviré timber port;
- In terms of bicycle parking, there are 540 new dedicated spaces in public spaces; 954 new sheltered spaces, including 700 spaces at the North Station Cyclostation and 300 spaces in the Commerce parking lot following its renovation, for a total of 20,838 bicycle spaces in the metropolitan public space and 4,376 sheltered spaces;
- continuation of the school eco-mobility scheme, the objective of which is to limit the use of the car for travel between home and school and encourage alternative modes such as walking, cycling, using a scooter or public transport. It includes an appraisal of the improvements to be made to promote and secure access conditions (marking, accessibility, calming, bicycle parking outside the school, etc.). In September, 10 new schools joined the programme, which was evaluated with all partners;
- the bicycle long or short-term rental services continue to attract new customers:
- - the number of "Bicloo Plus" subscribers stands at more than 36,000 with a fleet of 1,230 self-hire bikes at 125 stations;

- the number of subscribers to the medium and long-term bike-hire service “Mon Bicloo” reached 1,741 with a fleet of 2,190 bicycles (cargo, folding, standard with electric or pedal bicycles for each category);
- launch of a mobility hub experiment at La Chantrerie, designed to test solutions to cover the last kilometre in active modes from the stops on lines C6 and E5. It is a question of implementing electric bicycle and scooter services in a relevant manner as a relay to a structuring public transport line and thus responding to the internal mobility needs within a rapidly growing neighbourhood;
- Nantes Métropole received the “Talents du Vélo” award in the “Pedagogy” category. This is in recognition of its efforts to support active mobility, in particular via the “school eco-mobility” initiative and the associated communication actions.

Actions in favour of pedestrians

Numerous developments made it possible to increase, improve and secure pedestrian continuity in the municipalities of Nantes Métropole, in the context of roadway upgrades, urban renewal projects, public spaces or infrastructures.

In addition, in 2021, 8 streets in the Nantes city centre were permanently converted to pedestrian use as part of the tactical urban planning approach and 12 streets were temporarily converted during the spring-summer period. These measures notably made it possible to continue to support the activity of cafés and restaurants affected by the crisis by freeing up public space for their terraces, while also facilitating the emergence of activities that maintain neighbourhood life. Several sectors bordering the pedestrian area have also been maintained as temporary gathering areas.

Improve road safety and help prevent accidents involving schoolchildren

Calming the city also means raising awareness about road safety. As such, Nantes Métropole is working on a daily basis with all of its 24 municipalities and in conjunction with the State, the departmental council, the police, the Loire-Atlantique departmental fire and rescue service, the national education system and the voluntary sector to reduce the accident rate in its territory. To this end, Nantes Métropole has set up a system to monitor accident rates in the urban area.

With its partners, it is also helping to develop road safety awareness campaigns for schoolchildren, and regularly addresses the population.

Key figures in 2021

- 780 km of cycling infrastructures.
- More than 25,000 bicycle spaces in public areas of the city and nearly 5,000 sheltered spaces.
- 3,772 km of roads (all types of roads combined).
- Other pedestrian zones: 25 km
- 30 km/h zone / Section 30: 1,449 km. These zones include: Indre, Bouaye and Nantes almost entirely.
- Mixed-traffic zone (roads on which pedestrians have priority): 48 km.
- Restricted Traffic Zones (ZTL): 1.5 km.
- 217 personal injury accidents (provisional figure), 13 fatalities. It should be noted that the 2021 appraisal is still impacted by the health crisis and its effects on travel volumes.

ENCOURAGING AND SUPPORTING A CHANGE IN TRAVEL HABITS

To develop more eco-friendly mobility, we need to raise users' awareness of the environmental impacts of their travel choices, to create a desire to change and to provide them with support in this behavioural change. To do this, Nantes Métropole informs, advises and supports the various population groups according to their needs.

Financial assistance for bike purchases

Since 2010, Nantes Métropole has been encouraging local citizens and businesses to buy bicycles, either standard or electric, to boost cycling in the area. For example, in 2021, Nantes Métropole subsidized the purchase of 674 bicycles, broken down as follows: 275 family bicycles (cargo), 172 bicycles for professional use and 227 electric bicycles acquired by local citizens (post-Covid measure), for a total subsidy of €173,000.

Providing support for businesses

A quarter of all journeys made in the conurbation are related to work. The commute is also, on average, the longest journey of the day and is in large part the decisive factor in the choice of transport used for other daily journeys. Hence the importance of taking action in this area.

Since 2004, Nantes Métropole has accordingly been helping employers and their employees find the most suitable mobility solutions. The aim is to minimise single-occupancy vehicle use and encourage people to walk, cycle, use public transport and carpooling schemes.

The support provided by Nantes Métropole as part of the mobility plan scheme covers four main areas:

- assistance and advice;
- discounts on mobility services for employees and employers;
- information and awareness-raising initiatives for employees;
- the training of mobility officers at workplaces.

Since 2018, a new form of guidance and support for employers was adopted. It offers a range of tailored systems, depending on the extent to which each structure wants to be involved in promoting sustainable mobility to its staff. Three levels are available:

- Pack 1: information and benefits;
- Pack 2: events and activities;
- Pack 3: mobility expertise / studies.

All told, at the end of 2021, 894 employers (+143 / 2020) with a combined workforce of nearly 159,000 employees (+5,000 / 2020) had signed up to a mobility pack scheme (with 74% choosing Pack 1).

In addition to this individual support for employers on sustainable mobility, Nantes Métropole is pursuing its actions at the level of business clusters. The challenge is to map out more responsible mobility solutions for commuting by getting employers to work in tandem with the Community on rolling out joint initiatives.

In 2021, this resulted in the signing of the Chantrerie sustainable mobility charter and the launch of a mobility consultation process for the Hauts de Couëron and Pan-Loup.

Behaviour change awareness actions

Together with its partners from associations and mobility operators, Nantes Métropole is continuously carrying out actions and events aimed at employees, schoolchildren and the general public.

Accomplishments in 2021 included:

- more than 80 activities within companies;
- 48 activities for the general public (in municipalities, on markets, with students, in socio-cultural centres, etc.) as part of the May by Bike operation;
- 64 activities for 40 classes from 21 schools in 9 Nantes Métropole municipalities, as part of the school eco-mobility programme implemented with associations. In addition to these activities, the European fun challenge “The Traffic Snake Game” was carried out (1,186 pupils from 57 classes in 8 schools in 6 municipalities). The involved schools are also offered specific activities, such as:
 - SécuritéTan, a safety and citizenship education programme that involved 243 students in 4 schools. It is offered to fifth grade (CM2) classes in schools served by school transportation routes;
 - bike-riding lessons for pupils in CM1 as well as special eco-mobility awareness-raising events organised for parents and children. In 2021, 18 classes from 8 schools in 8 municipalities were involved in this programme (457 students and 2 activities).
- 1 event (the Christmas tree of the City of Nantes and Nantes Métropole’s social works committee) and 5 cultural venues in the conurbation (the 23, the Odysée, the Paul Fort hall, the Chronographe and the Sautron library) benefited from the eco-event support system, including the promotion of bicycle travel (temporary parking lots, bicycle marking, etc.).

Providing multimodal travel information tools and open data

To facilitate access to alternative means of transport to single-occupancy car use, Nantes Métropole continued the work initiated with various regional and national partners to provide the general public with travel information tools:

- [Destineo](#) is a multimodal information system managed by the Pays de la Loire Region (including the departments) and 11 mobility organising authorities such as Nantes Métropole and CARENE. This journey planner is one of the digital tools offered by SEMITAN and Nantes Métropole (websites and mobile apps, including “Nantes Dans Ma Poche”) to help online users plan their journeys or find out when the next bus or tram will arrive at their stop, for instance, using real-time information;
- [Geovélo](#) is a route planner specifically for cyclists, using a variety of criteria (speed, safety, tourism, etc.). It gives users information about the location and real-time availability of the bicloo bike hire stations. Cycle paths and bike parks are also included in the tool, which also lets users contribute to the maps by rectifying or adding information;
- [Ouestgo](#) is an open-source, socially responsible, free and inter-regional car-sharing app. This tool was developed and managed on a partnership basis with 5 other major Communities in Western France;
- Covoit’Tan, an application offering a carpooling service using your public transport pass and that pays drivers;
- e-démarche mobility, which provides a virtual subscription to public transport services;
- 98 “Mobility” data sets are available through the [data.nantesmetropole.fr](#) platform, which helps local apps find their audience. Some, such as [Naonedbus](#), have become very popular with users in Nantes;
- a partnership with the national platform [transport.data.gouv](#) to facilitate more extensive use of the data and help more users become familiar with the metropolitan area’s mobility services. The partnership also allows users to add to and check the quality of data sets.

Key figures in 2021

- 894 employers were involved in a mobility pack scheme, reaching a total of nearly 159,000 employees;

- 674 bicycle purchases were subsidised for a total of €173,000.
- 98 “Mobility” data sets provided through the data.nantesmetropole.fr platform.
- 128 awareness-raising activities on behaviour change in the 24 Nantes Métropole municipalities.

A GROWING RANGE OF PARKING SOLUTIONS

Parking is one of the key levers of Nantes Métropole's travel policy. It constitutes a tool for regulating the use of private cars in the territory. In order to free the public space from cars, parking in park-and-ride lots and covered parking lots is encouraged.

Park-and-ride facilities: increasingly available near the public transport network

With a choice of outdoor or multi-storey car parks, with open or controlled access, Park & Ride (P+R) car parks allow drivers and even cyclists to leave their cars, motorbikes and bicycles in secure parking and continue their journey by public transportation.

In 2021, the Neustrie P+R was delivered, the Recteur Schmitt P+R was renovated and work began on the extension of the Duguay-Trouin P+R.

In addition, the creation of the Porte de l'Estuaire P+R, linked to the extension of the C20 line to the ferry terminal, is being prepared. Two new structures (high-capacity facilities) are planned (by 2025-2026) on the P+R sites at Babinière and Bourdonnières.

In early 2021, the Nantes Métropole territory included a total of 62 P+Rs facilities. This represents 8,666 car parking spaces and 1,346 bicycle spaces, for a total of 10,016 parking spaces.

Note that since April 2021, in connection with free public transport on weekends, the park-and-ride facilities are also free.

Car parks in the Nantes city centre

The Commerce parking lot was modernized. It was made accessible to people with disabilities and has a secure bicycle park with 300 spaces. 10 charging stations for electric vehicles are also available.

On the Île de Nantes, construction work on the Nefs parking structures is continuing, with planned opening in late 2022. This new public car park will offer 500 parking spaces in the heart of the Creative district.

In addition to this offer, regulated on-street parking will be modified (extension of the perimeter and revision of pricing) from the end of 2022 in order to encourage vehicle rotation, promote access to the city centre and regulate the place of the car in the public space.

In 2021, attendance at both indoor and outdoor parks continued to be disrupted by lockdown periods related to the health crisis. A 17% decrease of visitors was observed for all P+R (36% in 2020) and 27% for car parks (33% in 2020).

Carpool sites

In 2021, 4 carpooling areas with a total of 88 spaces were built or signposted, bringing the number of official carpooling areas in the Nantes Métropole territory to 31, with a total of 1,307 spaces.

Also of note, the new parking garages and P+R facilities are equipped with charging stations for electric vehicles. At the end of 2021, 215 charging stations are available in public car parks in the city centre, the railway station and the Neustrie and Porte de Vertou P+Rs.

Key figures in 2021

- 62 P+R car parks providing 10,016 parking spaces, including 1,365 spaces for bicycles.
- 17 multi-storey car parks and 13 open-air car parks, totalling 9,173 parking spaces in Nantes city centre, including 1,569 bicycle spaces.
- 215 charging points for electric vehicles.
- 31 carpooling areas with a total of 1,307 spaces.

REDUCING, SORTING, COLLECTING AND RECYCLING WASTE

Nantes Métropole ensures the prevention and management of household and similar waste (DMA) for the 24 municipalities in the area.

By definition, household and similar waste is waste generated by residents, as well as any waste from the private and public sector that can be classified as household waste in terms of the quantity and type of waste produced.

The Public Policy on Waste, in the service of the ecological transition

Validated at the end of 2021, the two key objectives of the waste policy are derived from the Great Debate and the Energy Transition roadmap:

- to reduce household and similar waste by 20% by 2030 as compared to 2010 (in kg/inhab/year, excluding rubble);
- to achieve 65% material recovery of household and similar waste by 2025 (excluding rubble and hazardous waste).

The Nantes Métropole waste action plan is based on **3 strategic axes**:

- Nantes Métropole, a territory sober in resources and committed: reduce the amount of household and similar waste, fight against waste;
- Nantes Métropole, a driving force in the circular economy at all levels: improve the material recovery of waste through recycling and organic recovery;
- Nantes Métropole, an exemplary community in the implementation of the public waste service: offer a quality service by controlling the environmental impact of activities and ensuring the safety of agents and users.

Commitment at all levels:

From 12 to 15 October 2021, the Waste Management Department was audited by AFNOR (Association Française de Normalisation), which approved the renewal of its ISO 9001 (Quality Management) certification, immediate certification for ISO 14001 (Environment) and ISO 45001 (Occupational Health and Safety).

Nantes is now the first city to be certified for the entire waste cycle.

The objective of this triple certification process is to enhance the value of the work performed by all of the departments of the waste management division, so as to ensure the service quality for users, improve the environmental impact of the activities and ensure the safety of agents and users of the public waste service. This entails the implementation of the action plan in 2021.

A new local programme for the prevention of household and similar waste

A new local programme for the prevention of household and similar waste for the period 2021-2026 was adopted in December 2021. It is the result of appraisal work with the municipalities, the relevant structures of the territory and 4 prospective thematic workshops (60 participants). 154 proposals were submitted for public comment in the summer of 2021. They notably concerned the reduction of food waste through composting, the limitation of packaging and disposable plastics or awareness-raising of the public and the commitment of industries, companies, businesses and administrations.

The objective of reducing waste by 20% by 2030 was reaffirmed. This includes food waste, disposable packaging and plastics as well as textiles and objects that can be given a second life.

The programme includes **8 major axes**, broken down into different actions:

1. Informing and educating on waste prevention;
2. Reducing food waste;
3. Reclamation of food and garden waste insofar as possible;
4. Promoting sober

consumption; 5. Extending the life of objects and their reuse; 6. Becoming exemplary communities; 7. Encouraging professionals and event organisers; 8. Exploring incentive funding.

Public awareness initiatives on waste reduction and sorting

To raise public awareness of the importance of reducing and sorting waste, events adapted to the health crisis were held to allow waste coordinators to meet residents in person or online:

- a “zero waste citizen challenge” event (for the 6th year), in parallel with the “energy” and “food” challenges. It was carried out 100% remotely due to the health crisis. As a result, the number of engaged citizens dropped sharply in 2021 with 110 participating households representing nearly 300 people (compared to 215 registered households in 2020, representing approximately 800 people). Despite a challenge disrupted by the health crisis, participants reduced their waste by 29% in 3 months (i.e. a reduction of 30 kg of waste per person per year);
- the European waste reduction week, on the theme of reuse and repair of objects: A programme of events organised in conjunction with Ecopôle and its collective of some twenty associations, with practical workshops, tours, and information stands throughout the Nantes Métropole territory. Pop-up activities were also set up in the Atlantis (Saint-Herblain) and Beaulieu (Nantes) shopping centres, reaching more than 600 people. A total of 1,500 people took part in the week;
- the team of waste ambassadors and waste coordinators took part in events in the districts and municipalities. In total, 249 events brought together nearly 4,800 inhabitants from the local area and 2,290 pupils in schools (98 classes educated, including 11 classes that participated in a zero waste challenge);
- support for professionals, festival and event organisers in an eco-friendly initiative for the 9th year running. One of the main focuses of the metropolitan area’s eco-events programme is to help 40 organisations hold “zero-waste events”. NB: the support and training initiative has a dedicated website at www.reseau-eco-evenement.net.

Of course, many events had to be cancelled once again in 2021 due to the health context: the food waste prevention villages “Les Grandes tables de l’Agglo”, the information stands in public places, certain festivals and events. These schemes are postponed to 2022.

Development of composting

Nantes Métropole is stepping up its actions to **encourage local composting** of food and vegetable waste:

- financial assistance for individual composting and vermicomposting: since 2010, nearly 21,000 households have been provided with composting equipment with the help of Nantes Métropole subsidies. In 2021, 1,271 new households benefited from the initiative and 311 groups of residents received financial assistance for the purchase of a shredder for plant matter;
- consolidate, develop and support citizen composting projects, 38 new sites installed in 2021, i.e. 304 composters accessible to nearly 5,600 households in private (condominiums) or public spaces; 33 educational composters installed in schools, 6 in village squares;
- 15 awareness-raising operations on the shredding of plant matter were carried out for the inhabitants, including 8 organised in the municipalities and 7 in the territory’s waste collection centres and ecopoints;
- for the 5th year running, the Waste Department coordinated the collection and shredding of Christmas trees in Nantes’ 11 neighbourhoods. In 2021, 8,319 trees (839 m³ of trees) were collected, shredded and used by the City’s green spaces and gardens. Other Christmas tree shredding operations were also organised in the other municipalities.

Since the end of 2019, in addition to the development of local composting, the Waste Department has been experimenting with **separate collection of food waste**.

Started in a pilot sector of 3,000 inhabitants, the experiment was extended to the entire Nantes Nord neighbourhood in November 2021:

- 25,000 inhabitants are concerned by the collection of food waste;
- nearly 8,000 households in the Nantes Nord district were equipped with compost buckets for daily waste sorting, as part of a door-to-door information campaign;
- 200 collection points were set up in the neighbourhood, with 24-by-7 open access;
- the food waste collected each week is sent to the Terralys platform in Vallet to be composted by local farmers. Thus, food waste is given a new life and contributes to the development of a local organic recycling industry;
- The collection points are cleaned regularly as part of a dedicated service;
- 25 tonnes of food waste were collected and recycled as compost in 2021.

Prevention of food waste

The food waste prevention plan was rolled out in 2021 with:

- the trial to recover foodstuffs started at the Bellevue market in December 2020, in partnership with the city of Saint-Herblain, the 15 involved fruit and vegetable dealers and local associations, was a success. Every week, 3 tonnes of food waste are diverted from household waste (150 tonnes / year): 1/3 is redistributed via associations, the rest - not consumable - is recovered through composting. This initiative, led by 8 young people from the neighbourhood on a work experience contract, benefits about twenty families in the neighbourhood;
- awareness-raising of 20 classes to reduce food waste;
- the development of new information tools, including: the “Aidalim” map, which lists ten or so food donation structures that are able to collect unsold food at events; the Directory of stakeholders and solutions to reduce food waste and food insecurity;
- Supporting municipalities in their efforts to reduce food waste, with the first 8 cities having begun their reflection (appraisals, weighing in school restaurants); A first sharing of experiences was carried out (seminar on 15 October 2021 as part of the National Day against food waste). It brought together 50 participants, municipal services, associations around Ademe and Ansa (the national agency for active solidarity) .

1) Initiatives to increase the re-use of objects left at waste collection centres and in the districts have also been continued:

- projects led by associations (some 20 structures have been identified across the territory: resource centres and neighbourhood associations, mediation actions with inhabitants, repair workshops, etc.) and a comprehensive study led by the Ecosolies network (financially supported by Nantes Métropole and France Active Pays de la Loire) to encourage the development of a reuse and repair sector in the region;
- action by social landlords, who provide premises for pre-sorting, the collection of objects and bulky items, the establishment of partnership, the involvement of ambassador-residents. As part of the partnership between Nantes Métropole and Nantes Métropole Habitat, no new locations were opened in 2021 (with the number of “ICI-TRI” locations in the City of Nantes remaining at 20). An assessment of the operation of the existing premises was carried out in 2021 and an action plan was agreed upon to revitalize the facility in 2022 (before considering any new project).

2) More suitable waste disposal sites

At the waste disposal centres, the development of new waste streams and modernization work continued:

- Roll-out of polystyrene collection at all waste collection centres, ecopoints and the Petite Hollande market;
- development of the collection of edible oils at the Rezé, Nantes and Saint-Herblain waste

collection centres;

- test with Corépile of the collection of mobility batteries (e.g.: electrically-assisted bicycles) at the Rezé and Nantes waste collection centres;
- complete renovation of the Chantenay ecopoint, provision of new premises for the agents, creation of a reuse space and upgrading of the sewage system;
- securing the Prairie de Mauves waste disposal centre;
- set-up a skip for the collection of professional furniture at the bulky goods sorting centre and reinforcing safety measures for the collectors.

Waste collection

Highlights for pre-collection in 2021:

- 5,514,180 see-through yellow plastic bags and 16,485,780 Tri'sac bags were distributed;
- for "Tri'sac": 156 neighbourhood events, 77,696 visits to the Comptoir du tri, around 55 "backup" relay points and 3 bag sales outlets;
- See-through bags were distributed door-to-door and at 23 municipal and metropolitan relay points;
- 1402 underground waste bins (including 79 installed in 2021), 1,160 waste drop-off points (PAV) located throughout the metropolitan area, including 907 for glass recycling .

Focus on the expansion of sorting instructions for plastic packaging:

- On 1 January 2021, the extension of the sorting instructions, which allows the collection of all plastic packaging, was extended to the entire territory. To provide support for these changes, some thirty employees from the service provider "Trait d'Union" carried out a door-to-door awareness campaign in the relevant zones in order to explain the new instructions to residents;
- in parallel with the roll-out of the extension of sorting instructions, the Community undertook to containerize on behalf of the 13 municipalities using translucent yellow bags. The aim is to improve the working conditions of the agents. A field survey was conducted in 2021 to anticipate the delivery of yellow wheeled bins to households for dry waste collected in yellow bags. The distribution of wheeled bins began in March 2022 in the municipalities of Couëron, Indre and Saint-Herblain.

3) Towards harmonized selective collection in yellow bins and underground containers throughout Nantes Métropole

- An evaluation of Tri'Sac was conducted. With this system, which concerns 220,000 Nantes residents, coloured bags (yellow for recyclable waste and blue for household waste) must be deposited in the same bin and are then separated by an optical sensor at the Alcea plant. The evaluation showed that the quantity of recyclable waste (yellow bags) is lower in Tri'Sac than in the other sectors: 17.2 kilograms per year per inhabitant compared to 51 kg/inhabitant/year for the other sectors of Nantes. Also, in order to harmonize with the rest of the territory, a simpler solution will be proposed to the inhabitants of the Tri'Sac zone: recyclable waste will be deposited in bulk in the yellow bins and underground containers. The blue bins and underground containers will be dedicated to household waste.
- This new selective collection method will be implemented in Nantes Nord from the first half of 2023. The changes for the other Nantes neighbourhoods affected by Tri'Sac will be implemented between the end of 2023 and the end of the first half of 2024. Nantes Métropole will coincide the discontinuation of Tri'Sac with the arrival of food waste collection in the relevant sectors.

Processing and recovery

As part of a drive to manage waste streams, including paid-for waste, household refuse, waste from

selective waste collection, unsorted waste and green waste are treated at the Arc-en-ciel 2034 and ALCEA plants (through delegation of public service contracts).

- **Arc-en-ciel (AEC) 2034:** energy recovery unit, sorting centre and the production of recovered solid fuel in Couëron.

AEC 2034 started up the new sorting centre in October 2019. Among other benefits, the facility allows all packaging to be sorted: the plant produces 11 separate streams of recyclable materials.

- **ALCEA:** an incineration plant, Tri'Sac separation centre and transfer point at La Prairie des Mauves.
- **The Saint-Herblain green waste recycling platform**, belonging to Nantes Métropole and operated under a public contract, receives most of the green waste deposited by residents at the waste collection centre.

Other streams, from collection centres among other sources (asbestos, rubble, wood, paper, etc.), are handled through public contracts.

Glass collected at voluntary drop-off points is taken back and recycled by OI Manufacturing.

Key figures

- 326,292 tonnes collected in Nantes Métropole, i.e. 478.25 kg/capita.
- Excluding inert waste, the decrease of household waste per inhabitant is 6.36% compared to 2010 (444 kg/inhabitant).
- 135,683 tonnes of household waste recorded, i.e. 198 kg/inhabitant (down 29% from 279.7 kg/inhabitant in 2010).
- Slight increase (0.32%) in the quantity of packaging and paper collected (53.32 kg/inhab/year in 2010 and 53.37 kg/inhab/year in 2021).
- a 17% increase of the amount of recycled glass (from 28 kg/inhab/year in 2010 to 32.75 kg/inhab/year in 2021)
- 5,312 tonnes of furniture collected (compared to 3,448 tonnes in 2020).
- 303 collective composting facilities monitored by the association Compos'tri.
- Nearly 21,000 composters and individual vermicomposters subsidised since 2010.

WATER CYCLE MANAGEMENT

Nantes Métropole coordinates public water policy on drinking water, wastewater and rainwater treatment, and the restoration of aquatic environments. This is known as the water cycle. Nantes Métropole acts on behalf of the conurbation's 24 municipalities.

Since 2001, Nantes Métropole has acted as the organising authority for the mains drinking water supply and wastewater treatment for more than 640,000 residents. It has opted for a combination of water management systems across the local area. This makes it possible to provide certified high-grade water and a single tariff for all users.

Access to water for all

Nantes Métropole ensures access to water for everyone, through:

- a single water rate across all 24 municipalities since 2006;
- controlled pricing, thanks to its combination of management systems.

To strengthen solidarity, since 2016 Nantes Métropole has implemented a social pricing system in order to facilitate universal access to water (Brottes Act of 15 April 2013).

This law guarantees that no more than 3% of residents' income will be spent on paying their water bill, at a reasonable consumption rate of 30 m³ per person, per year. This amount is calculated after factoring in household income and the composition of the family.

In 2021, more than 7,427 households were entitled to subsidised water rates, for a total amount of €472,506 in subsidies paid.

In addition, Nantes Métropole began the roll-out of a real network of public fountains to reinforce this access to water for everyone within the territory. In 2021, 10 new fountains were installed.

La Roche water treatment plant 2nd phase of work in progress

This water treatment plant was built in the 1970s. It produces roughly 40,000,000 m³/year (85% of the Nantes Métropole consumption and 45% of the Loire-Atlantique region's consumption). To maintain the water quality and guarantee its supply over the next 40 years, Nantes Métropole has embarked on a massive upgrade programme to the tune of €85 million (ex. VAT) that will continue until 2023.

After the commissioning of the first structures at the end of 2017, the construction of the last structures continued in 2021: new sand filters, an ultraviolet lamp process that will provide additional protection against parasites, a pumping station for treated water, and a storage facility for coagulants. They will be commissioned in 2023.

Alongside the work programme, Nantes Métropole, in partnership with the CSTB (the building industry's scientific and technical centre), is continuing to monitor the water's organoleptic quality through its "Water taste observatory".

Every six months, 11 volunteer Nantes Métropole inhabitants taste samples of water collected at different locations across the territory. The experiment combines physiological measurements (heart rate, sweating and skin micro-circulation, etc.) with classical sensory reactions via sensors. Does the taste of the water change as the work advances? The results indicate that participants are generally happy with the drinking water within Nantes Métropole. The least popular samples are generally those with a stronger chlorine taste. A complementary study on the evolution of chlorine in water and its taste perception is in progress over the course of 2021-2023.

Wastewater treatment: commissioning of biogas at the Petite Californie wastewater treatment plant

Since June 2021, the Petite Californie water treatment plant in Rezé has produced biogas. This 100% renewable gas is produced locally from wastewater thanks to a methanization unit commissioned after 10 months of work. A minimum of 50% of local production is reserved for the needs of Nantes Métropole. This system replaced a cogeneration installation dating from 2011. As such, the production is multiplied by 10: 10.7 GWh of biomethane produced per year, i.e. the supply of hot water and heating

for 2,140 new homes or 42 buses running on bio-GNV.

Reinforced self-monitoring of wastewater treatment

With the aim of limiting human impact on the natural environment, since 2018, self-monitoring devices have been installed on 57 stormwater discharge stations and spillways, as well as 4 wastewater treatment plants. The aim is to gain a better understanding of malfunctions in sewerage networks and facilities.

In 2021, a second campaign started with the objective of installing about fifty new measuring points in order to reinforce the monitoring, to set up a permanent appraisal and to aim at a dynamic management of the wastewater system. After this study phase, the concrete installation of the new points is planned for 2022-2023.

Ongoing support for integrated stormwater management

Will future constructions be connected to the collective sewerage system or managed under a system of private sewage disposal? What measures must be taken to limit soil sealing on my plot? The wastewater and rainwater zoning defining these rules were annexed to the Local Metropolitan Urban Plan (PLUm) and adopted in April 2019.

In the context of climate change in which episodes of heavy rain are possible, rainwater management, based on rainwater zoning rules, aims to reduce the amount of sealed surfaces. This results in the use of permeable surfacings and rainwater collection where it falls, so that it can be returned to the natural environment, if possible by infiltration into the ground. In order to encourage application of these rules, accompaniment by means of technical support, training and information tools, such as action guides (for professionals and users), continued in 2021.

In 2021, preliminary studies to reduce the flooding problem in the Grenouillis sector at La Chapelle-sur-Erdre were carried out.

New restoration works planned for water courses

Built around a swathe of green and blue, Nantes Métropole boasts a rich array of natural environments that are often little known to local residents. For this reason, a coherent and concerted approach to protecting, renovating and enhancing aquatic environments is being implemented, reinforced by Nantes Métropole's responsibility for managing aquatic environments and averting flood risk since 2018.

To further improve the quality of aquatic environments (objectives of the Water Framework Directive (WFD)), restoration programmes on the Charbonneau, Cens and Gesvres catchment areas (for the next 6 years) were approved in early 2020. The work includes hydromorphological restoration of the watercourses, restoration of ecological continuity and removal of water bodies.

In 2021, the project management studies, local consultation and communication tools were carried out prior to this work in order to inform and involve the stakeholders as well as the users of the waterways. An action programme on the Grande Vallée de Bouguenais has also been underway since mid-2020, with one of the major challenges being the restoration of hydraulic functionality in various sectors. Campaigns to fight against invasive species such as Jussie (water-primrose) were conducted during the year on this site but also on the Marais Nord Loire and Charbonneau basins.

The "Ambitions for Aquatic Environments and Flood Protection" (AMAPI) study is continuing in order to define: the ambitions of Nantes Métropole for the restoration and preservation of the aquatic environments of the territory; the classification of the works to protect against floods under the competence of the GEMAPI. This will result in a roadmap of programmes and actions on these topics by 2033.

Revision of the SDAGE Loire Bretagne: Nantes Métropole voices its opinion

After a long revision process, the new 2022-2027 Loire Bretagne Water Development and Management Master Plan (SDAGE) was submitted for public consultation from 1 March until 1 September 2021. Nantes Métropole, as a stakeholder in the region, has submitted an opinion on the proposed guidelines.

This SDAGE sets a new ambition for the recovery of water quality and aquatic environments in the Loire basin. Among the new features, it introduces the notion of a Less Strict Objective (OMS) when the

good ecological status of a watercourse is not achievable in the short term. In an urban area such as Nantes Métropole, where many waterways have been made artificial, the levers are sometimes limited. This SDAGE also reinforces the requirements on the reduction of wastewater discharges during rainy weather. It was definitively approved by the Basin Committee on 3 March 2022 and its requirements must therefore be considered as part of the Community's water policy.

Key figures in 2021

- €3.58 (incl. VAT): the fixed price, as of 1 January 2022, per m³ of water used (based on a standard bill of 120 m³), including drinking water, sewerage and taxes paid to the Loire-Brittany Water Board;
- An average of 130,000 m³ of water/day was produced by the La Roche drinking water plant in 2021;
- 2 major inter-municipal water treatment plants were found to be compliant for 2021: Tougas at Saint-Herblain (600,000 population equivalents) and La Petite-Californie at Rezé-Bouguenais (180,000 population equivalents).
- 600 km of rivers and 400 km of marshland in the local area.

PRESERVING BIODIVERSITY

The diversity of natural areas and farmland in the conurbation is a major contributing factor to the quality of life of its residents. The design phase of this “Natural city” project was outlined within the framework of the PLUm, with the aim of protecting and improving the natural and agricultural heritage and operation of the ecological infrastructures while complying with regulatory obligations and development needs. This also requires an effort to reconcile urban and economic development at the local level (particularly agricultural) with the protection of biodiversity.

To ensure these spaces are protected and enhanced, Nantes Métropole’s environmental policy is structured around the following priorities:

- preserving biodiversity, wetlands and the green and blue network;
- achieving good ecological status of water bodies and restoring aquatic environments;
- developing trees and forests;
- maintaining agriculture;
- implementing a food roadmap.

Protecting and restoring the biodiversity of the local area

One of Nantes Métropole’s priorities is to provide a structural, cross-cutting and shared framework for the protection and restoration of biodiversity in the area, in line with the PLUm.

Highlights in 2021 included:

- the reorganisation of services, with the creation of the Nature and Gardens Department, bringing together agents working on the theme of life and plants. Two departments dedicated to the theme of biodiversity and trees were specifically created: “Research & Biodiversity” and “Trees & Canopy”. These services were pooled between the City of Nantes and Nantes Métropole. The finalization of a Metropolitan Biodiversity Atlas is in progress;
- an ongoing partnership with nature associations (Ligue de Protection des Oiseaux, Bretagne Vivante, Groupe Mammalogique Breton, Groupe d’Étude des Invertébrés Armoricaïns), the Centre Vétérinaire de la Faune Sauvage et des Écosystèmes, the Conservatoire Botanique National de Brest and Fédération de Pêche 44) to facilitate the exchange of knowledge, practices and expertise. This group of experts accompanied the project of the Metropolitan Biodiversity Atlas, by performing naturalist surveys in areas where there was no data;
- preparation on implementing the area-based metropolitan strategy entitled “avoid - reduce - compensate” (ERC), carrying on from the deliberations of the Metropolitan Council on 13 December 2019;
- support and guidance for the consideration of biodiversity and wetlands in metropolitan projects;
- the coordination of a network of “reservoir stations” for *Angelica heterocarpa* and *Scirpus triqueter*, with conservation action plans already in place. An inventory was produced in 2020 (cumulative effects);
- the establishment of a “Nature and Gardens” technical network; The role of the Nature and Gardens Department is to support the cities by coordinating this network. The objectives are to promote a culture of “green and natural spaces” and to develop common actions in order to support the metropolitan “Nature and Biodiversity” public policy. This network is based on 3 to 4 exchange days per year, thematic working groups, as well as training and technical days.

Expanding tree coverage and protecting urban forests.

Since 2006, Nantes Métropole has been developing an urban forest project, which is currently being rolled out on 1,400 ha of natural spaces and farmland at three sites in eight municipalities of the Nantes

conurbation.

This projects aims to:

- encourage the growth of vegetation of all kinds in these areas (reforestation, hedgerows, orchards, etc.) in liaison with public and private landowners and a number of institutional stakeholders;
- develop “carbon sink” sites and green oases in the local area, which are in keeping with the energy transition roadmap and feed into the Territorial Climate, Air and Energy Plan (PCAET);
- provide recreation areas close to urban centres where residents can discover nature.

Highlights in 2021 included:

- implementation of the master plan “The trees and forests of tomorrow”, a document that sets out a framework for expanding tree coverage in the local area, both on the three urban forest trial sites and in other zones of the metropolitan area by 2030-2050. This master plan, which is the result of a consultation process with the various stakeholders in the project (landowners, farmers, user representatives, forestry and agricultural professionals, etc.), is structured around 4 strategic directions (developing and enhancing wooded areas, discovering forests, innovating from trees, doing things together);
- the continuation of a forest management plan on a site of around 50 ha, and planting and maintenance work on the other metropolitan and municipal plots;
- the continuation of educational and discovery activities on a “Tree-Wood-Forest” cycle.

Supporting and developing agriculture...

Nantes Métropole has always viewed agriculture as a key economic activity in the balanced development of the conurbation. With this in mind, it has joined forces with the relevant partners to define and implement a shared action plan, before consolidating peri-urban agriculture in town planning documents.

In terms of agricultural production, Nantes Métropole and its partners, the Chamber of Agriculture, the GAB44, Cap44, and Terres de Liens, supported some thirty project leaders in 2021, via a permanent call for expressions of interest, which resulted in some fifteen installations.

Also in 2021:

- nearly €160,000 of aid was paid directly to farms for installation or clearing, promoting in particular organic farming;
- the deployment of the “Sensibio” approach, carried out by the GAB44 with 20 farmers, continued;
- Several urban agriculture experiments are emerging or being consolidated, with an ecosystem being formed and economic models to be strengthened, as in the case of several operations conducted in the neighbourhoods of Nantes, sometimes supported by Nantes Métropole;
- Nantes Métropole and the Chamber of Agriculture collected the data necessary to update the appraisals of farms and agricultural wastelands, which date from 2016. This data will be analysed and reported in the summer of 2022.

...within the framework of the territorial food project (PAT)

The Nantes Métropole PAT roadmap, adopted in October 2018, was subsequently supplemented by an action plan with quantified objectives. It will be elaborated in the Public Food Policy in 2022, that will define the key actions to be taken by the end of the mandate.

In addition to the productive dimension, we note:

- in-depth studies on certain subjects:
 - As part of the project, the Conference of EPCIs (Public Establishments for Intercommunal Cooperation) of the Loire Atlantique, a working group co-piloted by Nantes Métropole and the Federation of Municipalities of Nozay with the support of the MIN and the AURAN, laid the foundations of a strategy of sectors for access to quality food for all;
 - an initial metropolitan diagnosis of PAT practices in schools, particularly in terms of school catering;
 - several activity and facilitation initiatives conducted in 2021:
 - the “PAT workshops” to share issues and practices between elected officials, metropolitan and municipal services, with a session held at the end of September 2021 that brought together about a hundred elected officials and technicians;
 - the meetings of the Metropolitan Council of Food Stakeholders (CMAA); meeting 4 times in 2021 (including a session in Rennes), proposals are expected for 2022;
 - as part of the State’s Recovery Plan, the support of Nantes Métropole for some twenty projects led by associations or communities in connection with the PAT;
 - strength and cooperation with other territories (Pays de Retz, preparation of the PAT of the Departmental Council, etc.);
 - Finally, preparations intensified for the Territorial Conference on Agroecology and Sustainable Food that Nantes Métropole will host on 12 and 13 September 2022.

Key figures in 2021

- 16,427 hectares of natural areas, i.e. 30.7% of the local area, including 9,250 hectares of wetlands (resulting from the PLUm)
- 16,772 hectares of farmed agricultural land, i.e. 31.4% of the local area (resulting from the PLUm).
- 241 farms generating 1,400 direct jobs.
- 5 EU-protected “Natura 2000” zones, covering 7,062 hectares, i.e. 13.5% of the local area.
- 31 Special Fauna and Flora Ecological Interest Zones (ZNIEFF), including 21 type I zones (small areas and home to at least one determining species or one threatened habitat) and 10 type II zones (more extensive and representative of well conserved landscape features);
- 154 noteworthy plant species (protected, rare and endangered plants) including 88 related to wetland areas and aquatic environments.
- 408 animal species.

PREVENTING RISKS AND POLLUTION

Nantes Métropole is responsible for “preventing major technological and natural risks and combating pollution”. With this in mind, it has been developing an overarching, concerted approach to risks, pollution and environmental nuisances since 2001, based on partnerships with all of the local stakeholders: the 24 municipalities, the Departmental Fire and Emergency Service (SDIS), government departments, network operators and economic stakeholders, civil society and researchers. Since December 2014, Nantes Métropole has also been responsible for special police matters regarding law and order in eight municipalities of the metropolitan area, including Nantes.

With a view to keeping its inhabitants safe, Nantes Métropole aims to:

- learn to live with risks and reduce weaknesses of the territory and the organisation;
- improve the environments that are favourable to health, quality of the living environment and combat nuisances.

Working towards a more resilient territory

The resilience of a territory is its ability to manage and overcome a disaster.

At Nantes Métropole, this view of risk management and the notion of resilience entails:

- prevention, with a town planning policy that factors in the risks;
- anticipation, via a coordinated crisis organisation between Nantes Métropole and its 24 municipalities, in conjunction with all concerned actors.

Key measures:

- assistance provided by Nantes Métropole to the 24 municipalities in drawing up Local Contingency Plans (PCS): 22 municipalities adopted their PCS at the end of 2021 and the 2 remaining plans are being produced;
- Nantes Métropole emergency response plan (PIC): it enables metropolitan departments to respond rapidly in the event of exceptional circumstances (road traffic problems, interruptions to the water supply, severe storms, flooding, polluted locations, bomb scares, etc.);
- the principle of continuous improvement, with emergency drills, training for elected representatives and metropolitan employees, and knowledge building from feedback in order to strengthen the responses provided to exceptional events and crises.

Risk and crisis management initiatives

Nantes Métropole has three specialised departments to organise its action on the ground:

- the call centre for institutional calls and logistics organisation (CRAIOL): a single phone number to contact Nantes Métropole 24/7. An operator responds to urgent requests, analyses the request and information given (level of urgency, context, ownership) and triggers the necessary actions (request for call-out, decision, information from departments, etc.). They also manage spikes in calls in the event of major incidents and provide support in the event of an emergency;
- the Prevention and Risk Management unit: a team that leads / coordinates the crisis preparedness and risk prevention actions in the territory, cross-functionally with many departments. It also intervenes in the operational field, in support of coordination during exceptional events (Covid pandemic, weather events, sheltering of vulnerable populations, etc.) and on current disasters occurring within the Nantes area. This action is complementary to the intervention of the emergency services or emergency measures intended to safeguard the affected populations. In the event of a major incident affecting one of the Nantes

ENVIRONMENT AND URBAN SERVICES/PUBLIC SECURITY AND LAW AND ORDER

Métropole municipalities, the unit is tasked with lending assistance, where necessary, to the relevant community.

The teams of CRAIOL and the Risk Prevention and Management sector were especially active in 2020 and 2021 in the context of the Covid-2021 pandemic, notably concerning:

- logistical management of staff health protection equipment in the initial months of the pandemic;
- coordination of Business Continuity Plans, Business Recovery Plans, preparation for subsequent waves;
- coordination of a Covid network with all 24 municipalities;
- coordination of the Nantes vaccination centre on behalf of the State.

- the Cellule Opérationnelle de Prévention des Risques (Operational Unit For Risk Prevention – COPRE): it includes an operational team of technicians tasked with combating pollution (water, air and ground) and preventing industrial risks across the local area. The hub of exceptional partnerships with the SDIS 44 fire-fighters and the DREAL, the COPRE has the means to respond and investigate in order to assess and deal with any environmental damage affecting the local area. It should be noted that since 2020 and through an agreement, the COPRE's operational activity has been extended to the local area of the inter-municipalities of the Nantes Saint-Nazaire metropolitan cluster.

Additionally, in fire prevention matters, Nantes Métropole works alongside fire-fighters and mayors to adequately address the risk and maintain the good working order of the network of 7,056 public and 813 private fire hydrants installed across the conurbation.

Lastly, Nantes Métropole manages the inter-municipal pound, delegated by an agreement to the Société Protectrice des Animaux animal welfare charity.

Local application of the EU floods directive

Under the EU Floods Directive, 11 municipalities in the metropolitan area are identified as “major flood risk areas”: a local flood risk management strategy (SLGRI) was defined with 50 local actors, and adopted in 2018. A 29-point Flood Prevention Programme (PAPI d'intention Loire aval 2018-2023) enables the implementation of 29 actions of the SLGRI, in order to reduce the impacts of a major flood of the Loire on the territory.

Emerging risks, pollution and nuisances: contributing to inhabitants' health

To combat emerging risks and air pollution, Nantes Métropole has adopted overarching strategies to improve the quality of the living environment:

- Health, Safety and Environment Regional Plan “3”, and Local Health, Safety and Environment Action Plan throughout the Nantes territory;
- The Atmosphere Protection Plan, playing an active part in the studies and work being carried out by Air Pays de la Loire, which is responsible for monitoring air quality.

With regard to noise abatement, Nantes Métropole has drawn up its draft plan for the prevention of ambient noise in accordance with a European directive. The plan consists of a series of initiatives that aim to avert, reduce and rectify the effects of noise pollution.

Regarding the erection of mobile phone towers in its local area, Nantes Métropole is working with the stakeholders concerned to implement a charter on the terms and conditions for installing radioelectric stations. The aim is to enable the continued development of digital technology across the local area, since this is a vital drawcard.

Video protection: helping to protect and manage public space

Inter-municipal cooperation to rationalise resources and optimise the system

Under the NOTRe Act and a pooling arrangement between Nantes Métropole and the 24 municipalities, a working group set up with 10 municipalities has identified the needs to provide video protection coverage for certain public spaces.

Given the need to protect people and property, and in view of the complexity and dynamic management requirements of current networks, it was clearly preferable to act collectively, pool resources and share costs.

Accordingly, it was suggested that the interested municipalities set up a metropolitan urban surveillance centre as part of a metropolitan shared service.

This system aims to develop a carefully thought out, consistent, compatible and scalable system of video protection, and install cameras in the interested municipalities' local areas. By joining the pooled service, the participating communities will enjoy the benefit of technical support for installing, operating and maintaining the cameras, on the one hand, and pooled operating and maintenance costs, on the other. Nantes Métropole also contributes financially to setting up the network of cameras installed in their local area.

5 municipalities opted to join the pooled service:

- Nantes (138 cameras);
- Saint-Herblain (22 cameras);
- Rezé (12 cameras);
- Vertou (12 cameras);
- Basse-Goulaine (since 2021, with the roll-out of 6 cameras planned in 2022).

A system dedicated to protecting and managing public space

The installation of the metropolitan area's urban surveillance centre, set up on 16 April 2018, was accomplished in strict compliance with the applicable regulations on video protection. Moreover, if they so desire, the participating municipalities can draw up a charter and/or set up an ethics committee to ensure that individual freedoms are upheld.

The cameras connected to the CSU (Urban Surveillance Centre) are used solely for the protection of public spaces that tend to experience significant levels of crime and heavy user traffic (urban core areas, transport hubs and shopping districts). Specific sites deemed to be at-risk due to their spatial configuration or a specific vulnerability, may also be equipped with cameras.

Video protection in public spaces addresses the following objectives:

- improve the management of public spaces and the safety of people and property;
- provide a more adequate response to society's demand for safety and crime prevention;
- combat the sense of insecurity;
- assist the police force and the gendarmerie with their investigations;
- help keep people safe.

Providing comprehensive, continuous, shared handling of public order issues

The urban surveillance centre is tasked with:

- receiving video streams from the municipalities' cameras: 15 specialised operators control the cameras on a live, 24/7 basis;

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- addressing public order concerns in general, regardless of the time of day or night;
- working in close collaboration with law enforcement (reporting criminal offences, carrying out searches) and contributing to citizens' personal safety;
- extracting images on judicial requisition (keeping them for 15 days) and forwarding images as and when received to the police headquarters in Nantes.

A complementary system: video protection of public buildings

At the municipalities' request, Nantes Métropole launched a purchasing consortium to equip public buildings with video protection. Notice of the consortium was published in December 2018.

16 municipalities joined the purchasing consortium, namely Basse-Goulaine, Bouguenais, Brains, Couëron, Indre, La Chapelle-sur-Erdre, Les Sorinières, Nantes, Orvault, Rezé, Saint-Aignan de Grand Lieu, Saint-Jean-de-Boiseau, Saint-Léger-les-Vignes, Saint-Sébastien-sur-Loire, Sainte-Luce-sur-Loire and Vertou.

Key figures in 2021

- 22 Communal Safety Plans and 1 Metropolitan Crisis Response Plan.
- 14,538 calls handled by the CRAIOL call centre (8,739 incoming calls and 5,799 outgoing calls);
- 393 intentions, preventive files, opinions and expert appraisals of the COPRE.
- 1,553 flow rate / pressure checks on hydrants.
- 31 hydrants installed, 196 hydrants replaced, 50 hydrants repaired or moved.
- 74 hazard procedures initiated, 23 of which were followed by public orders.
- 430 RF radio repeaters in the Nantes Métropole area (pylons, water towers, churches and buildings).
- 5 inter-municipal technical committees in charge of approving proposed sites for installations in the metropolitan area.
- 695 RF radio stations (antennae for radio infrastructure operators).
- Urban surveillance centre (CSU):
- 82,904 video patrols conducted by the urban surveillance centre.
- 666 video viewings carried out by the CSU operators at the request of law enforcement.
- 453 image extractions performed in response to a court order.